

Landmarks 1

THE SYNTAX & SEMANTICS OF YORÚBÁ NOMINAL EXPRESSIONS

ỌLÁDÍPỌ AJÍBÓYÈ



Series Editor
Prof. O. M. Ndimele

VISIT...

LANZAROTE
Caliente.COM

Yorùbá Nominal Expressions

In the same series

1. Ajiboye, Oladipo. *The Syntax & Semantics of Yorùbá Nominal Expressions*
2. Anyanwu, Ogbonna Ndubuisi. *The Syntax of Igbo Causatives: A Minimalist Account*
3. Ngulube, Isaac. *The Eleme Phonology*
4. Obiamalu, Greg Orji. *Functional Categories in Igbo: A Minimalist Perspective*
5. Onumajuru, Virginia C. *Affixation and Auxiliaries in Igbo*
6. Ashipu, K.B.C. *Bette Ethnography: Theory & Practice*
7. Èjèbá, Salem Òchála. *A Grammar of Ígálâ*
8. Isaac, Baridishi Hope. *Aspects of the Grammar of Gokana*

The Syntax & Semantics of
Yorùbá Nominal Expressions

ỌLÁDÍPÒ AJÍBÓYÈ

*Department of Linguistics & African Languages
University of Abuja, Nigeria*

M & J Grand Orbit Communications Ltd.
Port Harcourt

The Landmarks Series Publications
Landmarks Research Foundation
Box 237 Uniport P.O.
University of Port Harcourt, **Nigeria**

e-mail: mekuri01@yahoo.com
Mobile Phone: 08033410255, 08052709998

Copyright © Oládiipò Ajíbóyè 2016

First Impression 2005

All rights reserved.

No part of this book may be used or reproduced in any manner, by print, photoprint, microfilm, or any other means, without written permission from the Copyright owner except in the case of brief quotations embodied in critical articles and reviews.

ISBN 978-978-54164-5-9

Published by

M & J Grand Orbit Communications Ltd.
Port Harcourt, **Nigeria**

Overseas Distributors:

African Books Collective
PO Box 721, Oxford OX1 9EN, United Kingdom
Tel: +44 (0) 1865 58 9756, Fax: +44 (0) 1865 412 341
US Tel: +1 415 644 5108

Customer Services please email
orders@africanbookscollective.com

For Warehouse/shipping/deliveries:
+44 (0) 1865 58 9756

Dedication

This book is dedicated to my children:

Ọláòníbòjì, Jẹnrọlá, Ọmọle, Ọdúnìtàn, Táyéwò and Kẹhìndé

Editorial Note

The Landmarks Series is a research and publications outfit funded by the Landmarks Research Foundation to publish recent outstanding doctoral dissertations on any aspect of Nigerian linguistics, languages, literatures and cultures. The purpose is to encourage the circulation of ideas generated by some recently completed doctoral dissertations by members of the Linguistic Association of Nigeria (LAN). It is hoped that the opportunity to publish in the Landmarks Series might be extended to non-members of the Linguistic Association as well in due course.

Dr. Oládíipò Ajíbóyè was among the first to respond to this all important invitation to members of LAN who completed their doctoral dissertations within the last 10 years to submit their revised dissertations for consideration and publication in the Landmarks Series.

The present book in print is a revised version of Dr. Ajíbóyè's doctoral dissertation entitled: *Topics in Yorùbá Nominal Expressions*. The book is organised in six chapters.

Chapter 1 introduces the main themes as well as the proposal for each topic that was discussed in the main part of the book.

Chapter 2 explores four sub-themes. It accounts for the semantics of the relation between the two arguments that are in a genitive construction; the syntax of the R-relation; the syntax of Yorùbá nominal genitives, and how the syntax of Yorùbá genitive interacts with phonology.

Chapter 3 is on the analysis of genitive constructions that contain the element *ti*. First, it establishes a relation between the genitive M-tone *ti* constructions and the H-tone *tí* relative clauses. It discusses the relationship between the *ti*-genitive and the mid tone syllable (MTS) showing that in addition to occurring by themselves, they may also co-occur. It also looks at the co-occurrence of *ti* with preverbal possessor constructions. Finally, it compares the M-tone *ti* found in genitive environments with the M-tone *ti* found in non-genitive environments.

Chapter 4 examines the distribution and interpretational variability of bare nouns in Yorùbá. It answers the questions of what determines the generic, indefinite and definite construals of bare nouns. It also looks at the consequences of these construals on the syntax of Yorùbá bare nouns.

Chapter 5 claims that while indefinite NPs are morphologically marked for specificity with the element *kan*, definite DPs are morphologically marked for salience with the element *náà*. It also demonstrates that a nominal

expression is interpreted as specific if it refers to an entity the speaker has some knowledge about. It also demonstrates that the element *náà* marks nouns as salient in one of three ways: by picking a unique referent, by identifying a referent with a previously mentioned referent or by adding a referent to a previously established set.

Chapter 6 shows that Yorùbá adopts three strategies for marking plural on its nouns. It shows that plural marking can be contextually determined: in this instance, there is no designated morpheme or word. The second strategy is the semantically determined pluralisation: certain lexical items (quantifiers and numerals), by virtue of their inherent semantics are necessarily construed as plural. The third strategy is the morphologically marked plurality, i.e. certain morphemes have an exclusively plural function.

In all, this is a well-researched, well-executed, and a monumental book that recommends itself to scholars in dire need of texts of a good tradition. I use this medium to solicit more quality submissions. I am strongly encouraged by this outing.

Ozo-mekuri Ndimele, PhD

Professor of Comparative Grammar

Founding Editor & National President, LAN

June 2007

Preface

This book originated from my doctoral dissertation defended at the Department of Linguistics, University of British Columbia, Vancouver, Canada, on 31 October, 2005. It departs from most previous work on Yorùbá Grammar in the sense that rather than being purely a descriptive grammar; it attempts to provide a theoretical analysis of the internal and external syntax of Yorùbá nominal expressions using the Chomskyan Principles and Parameters approach to syntax. This Generative theory attempts to characterize the grammar of all natural languages in terms of a set of universal principles that all languages share, and a set of parameters along which languages may vary. The book emphasizes the empirical motivation behind major theoretical proposals in that framework, and shows how views on the nature of universal grammar and cross-linguistic variation have developed over the years as a consequence of a massive increase in cross-linguistic syntactic research.

Its themes cover four areas of Yorùbá nominal expressions namely possessive/ genitive constructions, the construal of bare nouns, the marking of specificity and salience and strategies of plural marking.

Regarding possessives, it is proposed that they have one base structure (a vP shell). The difference in surface linear order between verbal and nominal genitives is determined by which of the two arguments move. In nominal genitives, the possessum moves. In verbal genitives, it is the possessor that moves.

Regarding the interpretation of Yorùbá bare nouns, it is shown that they can be construed in one of three ways: as generics, as indefinites, or as definites. First, generics may be lexically conditioned (with permanent state predicates) or grammatically conditioned (with transitory predicates through the use of imperfective *máa-n*). Second, wherever a generic construal is illicit, an indefinite construal is licit. Third, definite construals are discourse-linked.

Regarding specificity, it is established that Yorùbá overtly marks specificity on NPs with the element *kan*. Regarding salience, it is shown that definite DPs are morphologically marked as salient (by virtue of being unique, in an identity relation or additive) through the use of *náà*.

Finally, regarding plural marking, it is claimed that Yorùbá uses three different strategies: contextually, semantically, or morphologically determined

plurality. It is proposed that the deployment of the PLURAL feature cross-linguistically is determined by feature percolation or feature matching.

Although Yorùbá is among the best-studied languages of the Niger-Congo family, no one has described these areas of Yorùbá Grammar to the best of my knowledge. To this end, the book fills in empirical gaps such as reasons the genitive marker is optional in certain contexts; the mid tone *ti* cannot be interpreted as noun etc. It also establishes the role played by predicate-type in the construal of bare nouns. This book is also the first to establish relatively complete paradigms of morpheme order and interpretation in noun phrases in the language. The range of facts is used to argue for particular theoretical proposals, which are currently of interest in the community of linguists working in the Chomskyan Principles & Parameters and Minimalist framework. Thus, it brings Yorùbá nominal syntax up to date in terms of generative research.

The book is primarily aimed at students at undergraduate and postgraduate levels in Nigeria Universities who may be speakers or non-speakers of Yorùbá language. Further, since it is a theory based book, readers are anticipated to be linguists all over the world who have been working on nominal expressions (DP structures) in different languages. I also believe that non-linguists who will like to enrich their knowledge of how other languages are similar or different from the language they speak will be interested in reading this book. I attempt to strike a balance between the theoretical frameworks and empirical facts as both complement each other. Although many of the data provided come from the Yorùbá language, I also draw examples from other languages that share certain relevant features with Yorùbá. The issues discussed in the book will also appeal to international audience (linguists and non-linguists) for two reasons. First, the theoretical frameworks developed are not language specific as such; they are readily available for test in other languages. Following from the first reason, is the fact that examples from many languages are cited where necessary to show that claims made for Yorùbá are attested in other languages.

Bí a kò bá tètè kú, a ó jẹran tó tẹrin

The longer we live, the more we achieve

I would like to thank a number of people for their contribution towards the study that produce this book. First, I would like to thank Rose-Marie Déchaine, my mentor and supervisor of my doctoral dissertation, which gave birth to this work for her time, insightful and provocative thoughts and ideas, as well as her financial support through her various research grants. I am equally grateful to Douglas Pulleyblank and Martina Wiltschko for their valuable contributions (academically and financially) as members of my dissertation committee. I am

short of adequate words to convey my deepest appreciation to Victor Manfredi who supplied relevant academic materials even at short notice. He made his library available to me each time I visited him in Boston. I also thank him for his immense contribution in form of comments, criticisms and suggestions to the upcoming of this book. Though some of his suggestions could not make it into this edition, they form a strong basis for future research. I also owe my wife, Modúpẹ, special thanks for her moral and emotional support.

Finally, I give the Almighty God all the glory. Without his approval, it would have been impossible for me to go to UBC. Without his support and assistance, it would have been impossible for me to sail through the storms that I journeyed during the course of the study. The totality of what God has done for me is found in the following Yorùbá song:

Aṣòro ẹ b'òhun t'Ólúwa ò lẹwọ sí
 A dùn ún ẹ b'òhun t'Ólúwa ti ẹ tán
 Ayé ẹ má tu wò
 Iṣẹ Olúwa ni (Sunny Ade 1983)

When God says no, nobody can say yes
 When God says yes, nobody can say no
 You dare not inquire
 It is God's work

Ọládiípò Ajíbóyè
University of Abuja, Nigeria

Table of Contents

Dedication	v
Editorial Note	vi
Preface	viii
Abbreviations/List of Conventions	xvi
Chapter 1: Introduction	1
1.1 Purpose and organization	1
1.1.1 Expression of possessive relation	1
1.1.2 Discourse related interpretation	2
1.1.2.1 Interpreting bare nouns	3
1.1.2.2 Marking nouns for specificity and salience	3
1.1.3 Plural strategies	4
1.2 Clause structure	5
1.2.1 Small clause	5
1.2.2 Relative clause	6
1.2.3 The Internal Structure of Yorùbá DP	7
1.2.3.1 DP and the D position	11
1.2.3.2 Genitive structure in DP	11
1.2.4 D(emonstrative) and NP	12
1.2.5 Modification	14
Chapter 2: Yorùbá Genitive constructions	19
2 Introduction	19
2.1 The semantics of the R relation	19
2.1.1 Three kinds of R-relation	20
2.1.2 “Possessive” versus “Genitive”	22
2.1.3 Possessor and Possessum	26
2.1.4 The three types of genitive constructions in Yorùbá	26
2.2 The syntax of the R relation	27
2.2.1 Possessor-Possessum as a co-argument relation	27
2.2.1.1 Base structure for Yorùbá genitives	28
2.2.1.2 Other languages with overt genitive morpheme	33
2.2.2 Possessor-Possessum as a Head-Complement relation	34
2.2.3 Parallels between V-syntax and N-syntax	35
2.2.3.1 Parallels between the verbal possessive and the nominal genitive	36
2.2.3.2 Parallels between IP-syntax and DP-syntax	38
2.3 The Yorùbá nominal genitive: syntax	39
2.3.1 Yorùbá genitive constructions involve a co-argument relation	39

2.3.2 Possessum raising in Yorùbá genitive constructions	40
2.3.3 What moves: N or NP?	44
2.3.3.1 Evidence from modifier placement	44
2.3.3.2 Evidence from structural ambiguity	45
2.3.3.3 Evidence from selectional restrictions	46
2.3.4 Genitive pronouns	48
2.4 The Yorùbá nominal genitive: syntax-phonology interaction	51
2.4.1 Spelling out the genitive: cross-linguistic evidence	52
2.4.2 The phonological distribution of the Mid Tone Syllable	55
2.4.3 Analysis I: the Mid Tone Mora is an underlying Mora μ	57
2.4.4 Analysis II: the Mid Tone Mora as phonologically conditioned segment	62
2.4.4.1 The Mid Tone Mora is not a genitive morpheme	62
2.4.4.2 The Mid Tone Mora as a prosthetic vowel	64
2.4.4.3 The Mid Tone Mora as a mark of hesitation	67
2.4.5 Relating the Mid Tone Mora to L-deletion	68
2.4.5.1 The necessary and sufficient conditions for L-deletion	75
2.4.5.2 MTM & L-deletion are in complementary distribution	76
2.5 Conclusion	77
Chapter 3: <i>ti</i>-genitives as reduced relative clauses	79
3 Introduction	79
3.1 The parallel between <i>ti</i> genitives and <i>tí</i> relative clauses	81
3.1.1 Two structures for relative clauses	82
3.1.1.1 Relative clauses as complements to D	82
3.1.1.2 Relative clauses as adjuncts to NP	84
3.1.2 <i>ti</i> genitives are reduced relative clauses	87
3.1.2.1 M-tone <i>ti</i> and H-tone <i>tí</i>	93
3.1.2.2 MTM and HTM	95
3.1.2.3 M-tone <i>ni</i> and H-tone <i>ní</i>	96
3.1.2.4 The significance of H-tone/M-tone alternations	97
3.1.3 The <i>ti</i> N construction	97
3.1.3.1 <i>ti</i> as Complementizer analysis	98
3.1.3.2 <i>ti</i> as N analysis: Awóbùlúyì (2004)	100
3.1.4 Assigning genitive case to the possessor	105
3.1.4.1 The co-argument analysis: exceptional case marking	106
3.1.4.2 The Head-Complement analysis: case under government	106
3.1.5 Assigning structural case to the raised possessum	107
3.1.5.1 The problem	107
3.1.5.2 Assigning Structural case to the raised possessum I: Nominative	108
3.1.5.3 Assigning Structural case to the raised possessum II: Accusative	109
3.2 Genitive Case assignment and co-occurrence of the MTM with genitive <i>ti</i>	110

3.2.1 Case alternations: the Mid Tone Mora or <i>ti</i>	110
3.2.2 Case stacking: the Mid Tone Mora and <i>ti</i>	111
3.2.3 Interpretive effects of Case stacking	113
3.3 The co-occurrence of the copula <i>jě</i> with genitive <i>ti</i>	115
3.4 Other syntactic contexts for the R-relation: prepositional uses of <i>ti</i>	118
3.4.1 <i>láti</i> as a locative P at the right edge of vP	119
3.4.2 <i>ti</i> as a locative P at the left edge of the vP	120
3.4.3 <i>ti</i> as a marker of adjunct extraction	122
3.5 Conclusion	123
Chapter 4: Interpreting Yorùbá bare nouns	125
4 Introduction	125
4.1 The determinants for interpreting Yorùbá bare nouns	126
4.1.1 Verb classes	126
4.1.1.1 Permanent states	127
4.1.1.2 Temporary states	127
4.1.1.3 Events	128
4.1.1.4 Distinguishing “temporary-state-events” and “permanent states”	129
4.1.2 Subject versus object position	131
4.1.3 Discourse-linking	131
4.2 What conditions the generic construal of bare nouns?	133
4.2.1 P(ermanent)-states have a lexical GEN operator	134
4.2.1.1 Bare noun object of transitive P-states	136
4.2.1.2 Bare noun subject of transitive P-states	137
4.2.1.3 Bare noun subject of intransitive Permanent-states	139
4.2.2 T(emporary)-states require a grammatical GEN operator	140
4.2.2.1 Bare noun object of transitive T-state	141
4.2.2.2 Bare noun subject of transitive T-state	142
4.2.2.3 On the absence of intransitive T-state in Yorùbá	142
4.2.3 Events require a grammatical GEN operator	143
4.2.3.1 Bare noun object of transitive event	144
4.2.3.2 Bare noun subject of transitive event	144
4.2.3.3 Bare noun subject of intransitive event	145
4.2.4 Analysis of grammatically conditioned genericity	145
4.2.5 Extending grammatically conditioned genericity to Permanent State verbs	148
4.2.6 Contrast between English and Yorùbá genericity: evidence for default aspect	151
4.3 What conditions the indefinite construal of Yorùbá bare nouns?	153
4.3.1 Defining indefiniteness	153
4.3.2 Generic and indefinite construals are in complementary distribution	154
4.3.3 Elsewhere case: indefinite bare nouns are bound by existential operator	156

4.4 What conditions the definite construal of Yorùbá bare nouns	159
4.4.1 Defining Definiteness	159
4.4.2 Definite construal is unavailable in out-of-the-blue contexts	161
4.4.3 Definite construal arises from Discourse linking	161
4.5 Consequences of the analysis	163
4.5.1 Bare nouns are structurally ambiguous	163
4.5.1.1 Bare nouns can be NP or DP	164
4.5.1.2 Critique of previous analysis (Ajíbóyè 2001)	164
4.5.2 Implication for the analysis of genitive constructions	166
4.6 Conclusion	167
Chapter 5: Marking specificity and salience in nominal expressions	169
5 Introduction	169
5.1 Specificity in Yorùbá: <i>kan</i>	171
5.1.1 Defining specificity	171
5.1.2 Marking specificity	172
5.1.2.1 Yorùbá	172
5.1.2.2 English	174
5.1.2.3 Turkish	174
5.1.2.4 Gungbe	176
5.1.3 Testing for specificity I: Speaker knowledge Ludlow and Neale (1991)	177
5.1.4 Testing for specificity II: the subset relation Enç (1991)	179
5.1.4.1 Yorùbá	179
5.1.4.2 English	181
5.1.4.3 Turkish	182
5.2 Salience in Yorùbá: <i>náà</i>	183
5.2.1 Defining Salience	184
5.2.1.1 Uniqueness	184
5.2.1.2 Additivity	185
5.2.1.3 Identity	185
5.2.2 Marking salience in Yorùbá	186
5.2.2.1 Focused <i>náà</i> -arguments: uniqueness or identity function	187
5.2.2.2 <i>Náà</i> marks additivity or identity with (non-focused) arguments	190
5.2.3 Testing for salience	193
5.2.3.1 Yorùbá salient nominals can't be indefinite	193
5.2.3.2 Yorùbá salient nominals can be "free choice"	195
5.2.3.3 No dedicated marking for salience in English	196
5.2.4 <i>náà</i> combines with other functional elements within the DP	196
5.3 The syntax of <i>kan</i> and <i>náà</i>	199
5.4 The number interpretation of <i>náà</i>	200
5.5 Conclusion	201

Chapter 6: Plural strategies in Yorùbá.....	203
6 Introduction.....	203
6.1 Contextually determined plurality	204
6.1.1 The General number analysis.....	205
6.1.2 Unspecified for number resulting in ambiguity	205
6.1.3 Unspecified for number with obligatory singular interpretation	208
6.2 Semantically determined plurality	209
6.2.1 The feature percolation analysis	209
6.2.2 Inherently plural Quantifiers	212
6.2.3 Inherently plural numerals	214
6.2.3.1 Accounting for the floating tone of the m-numerals	217
6.2.3.2 Other languages that pattern with Yorùbá	218
6.3 Morphologically determined plurality	220
6.3.1 <i>Àwọn</i> marks plural on nouns	221
6.3.1.1 <i>Àwọn</i> as a pronoun	222
6.3.1.2 Appositive analysis of PL-NP	223
6.3.1.3 Internal structure of <i>Àwọn</i>	225
6.3.2 <i>wọn-</i> marks plural on demonstratives	227
6.3.3 Reduplication marks plural on modifiers	230
6.3.3.1 What prevents N copy: blocking?	236
6.3.3.2 The emergence of the unmarked	238
6.3.4. Multiple plural marking	239
6.3.5 Feature percolation versus feature matching	242
6.4 Comparing analyses	245
6.4.1 The plural parameter (Déprez 2004)	245
6.4.2 Plural marking as a functional head or as a modifier (Wiltschko 2004)	246
6.4.2.1 Plural marking as a functional head	247
6.4.2.2 Plural marking as a modifier	247
6.5 Conclusion	249
References	251
Subject Index	265

Abbreviations

ACC	accusative	MTM	mid tone mora
Agr	agreement	Neg	negation
ARG	argument	NOM	nominative
Asp	aspect	Nom	nominalizer
AspP	aspect phrase	Num	numeral
BN	bare noun	O	object
C	complementizer	OP	operator
CP	complementizer phrase	PL	plural
DEF	definite	Poss'r	possessor
Dem	demonstrative	Poss'm	possessum
DET	determiner	Prog	progressive
DP	determiner phrase	P-state	permanent state
Emph	emphasis	Q	quantifier
ERG	ergative	RP	resumptive pronoun
Fut	future	SAL	salience
GEN	generic	SG	singular
Gen	genitive	SLP	stage level predicate
HTM	high tone mora	Spec	specifier
I(NFL)	inflection	SPF	specificity
IMP	imperfective	S	subject
Indef	indefinite	SY	Standard Yorùbá
IP	inflectional phrase	T-state	temporary state
Loc	locative	V-event	event verb
MB	Mòbà		

Chapter 1

Introduction

1.1 Purpose and organization

This book investigates selected topics on Yorùbá nominal expressions and makes a number of proposals that enable us understand the internal and the external structure of the Yorùbá DP. Although the internal structure of Yorùbá nominals has been extensively described (Awóyalé 1974; Awóbùlúyí 1978; Bámgbóşé 1966, 1967, 1990; Yusuf 1995), there remains the question of whether more recent theories of syntax such as the ‘DP hypothesis’ (Abney 1987; Aboh 1999, 2004; Cinque 1994, 2004, 2005; Kayne 1994; Longobardi 1994, 2000, 2003, 2004) can provide insight into the syntax, pragmatics and semantics of Yorùbá nominals.

The book deals with four related topics on nominal expressions, which are as follows: the expression of the possessive relation (chapters 2-3), how bare nouns are construed (Chapter 4), how specificity and salience are marked (Chapter 5), and plural marking strategies (Chapter 6).

1.1.1 The expression of the possessive relation

Chapters 2 and 3 examine how the possessive relation (henceforth R) is expressed in nominal and verbal environments. The first part of Chapter 2 discusses the semantics of the R relation, which forms the basis for possessive constructions. The second part deals with the syntax of the R relation, proposing that the Possessor-Possessum relation is best analyzed as a co-argument relation. I also show that there is a parallel between verbal possessor constructions, such as (1a) and their nominal counterparts in (1b). I propose that both (1a) and (1b) derive from the same base structure.

- (1) a. Túndé ní ilé *Possessor verb Possessum*
 T. have house
 ‘Tunde has a house’
- b. ilé e Túndé *Possessum MTS Possessor*
 house MTS T.
 ‘Tunde’s house’

Observe that the linear order of the possessor and the possessum in genitive constructions is the mirror image of what is obtained in verbal possessives. The other concern of Chapter 2 is to account for the phonological content of the mid tone genitive morpheme, which shows up between arguments that are in a genitive relation as in (2a), but is sometimes absent as shown in (2b).

- (2) a. Mo dé [ilé e Tundé] *possessum MTS possessor*
 1sg reach house MTS T.
 ‘I got to Tunde’s house.’
- b. Gómìnà pàṣẹ kí wọn ri *possessum MTS possessor*
 governor give-order C 3pl erect
 [èrè Awólówò] sí oríta Baṣòrun
 statue A. Loc junction B.
 ‘The Governor ordered that the Awolowo’s statue be erected at Basorun junction.’

An extensive account that aims at establishing the phonological content of the M-tone syllable as well as its syntactic and semantic functions is undertaken.

Chapter 3 continues the analysis of genitive constructions with more complex structures, looking at the occurrence of possessum NPs with *ti*-phrases. The example in (3a) indicates that it is possible for the M tone *ti*-element to occur between the possessum and the possessor. The example in (3b) shows the co-occurrence of the MTS and the *ti*-element.

- (3) a. Tolú fẹ [èrè ti Awólówò] *possessum C possessor*
 T. want statue C A.
 ‘Tolu wants the Awolowo’s statue.’
- b. Mo gba [owó o ti Bùnmì] *possessum MTS C possessor*
 1sg get money MTS C B.
 ‘I got Bunmi’s money.’

I propose that nominal genitives of the type shown in (2) are to be analyzed as plain genitive DPs and that D, which is occupied by the MTS, takes a small clause (VP) as its complement. In the same way, I propose that the genitive plus *ti*-construction in (3) is to be analyzed as a DP with its overt D taking a reduced relative clause (CP) as its complement.

1.1.2 Discourse related interpretation

Chapters 4 and 5 examine some discourse related interpretive properties of nominals

in Yorùbá based on whether they are new, familiar, specific or salient in the discourse.

1.1.2.1 Interpreting bare nouns

Chapter 4 establishes three different ways by which bare nouns can be construed: generic (4a), indefinite (4b), and definite (4c).

- | | | | | |
|-----|----|-------------------------|-------------------|-------------------------------|
| (4) | a. | Tayé fẹràn ajá | <i>generic</i> | |
| | | T. like dog | | |
| | | ‘Taye likes dogs.’ | | |
| | b. | Tayé rí ajá | <i>indefinite</i> | |
| | | T. see dog | | |
| | | ‘Taye saw a dog.’ | | |
| | c. | Tayé gbé ajá | <i>definite</i> | (in proper discourse context) |
| | | T. carry dog | | |
| | | ‘Taye carried the dog.’ | | |

I demonstrate that these construals are determined by the syntactic position of the bare noun (subject versus object), the predicate type (permanent state versus temporary state/event) as well as discourse linking.

For a generic construal, this work shows that there are two possible ways by which this can be obtained: (i) lexically conditioned generics that are bound by a null generic (GEN) operator, and (ii), grammatically conditioned genericity that is introduced by the imperfective aspectual marker *máa-n*.

Lexically conditioned generic construals are found with permanent state predicates whereas grammatically conditioned generic construals are found with transitory (temporary state and event) predicates.

As for indefinite construals, I show that they are possible wherever a generic construal is not otherwise available. Thus, I demonstrate that a bare noun is generic if there is a GEN operator, and that elsewhere it is indefinite. Lastly, I show that in Yorùbá, any bare noun can be definite in the proper discourse context.

1.1.2.2 Marking nouns for specificity and salience

Chapter 5 focuses on another discourse related interpretation. I show that nouns in Yorùbá can be morphologically marked for specificity and salience. When a noun is unfamiliar and new (i.e. indefinite) it can be overtly marked for specificity with *kan* (5a). On the other hand, when a noun is familiar (i.e. definite) it can be overtly marked for salience with *náà* (5b).

-
- (5) a. Tayé rí ajá **kan** *specific*
 T. see dog specific
 ‘Taye saw a CERTAIN dog.’
- b. Tayé rí ajá **náà** *salience*
 T. see dog salient
 ‘Taye saw the VERY dog.’

I argue that the facts reported above for Yorùbá contrast in interesting ways with a language like English. For example, in environments where English would require overt marking of definite or indefinite, Yorùbá has null ($\emptyset$) marking; i.e. bare nouns. In environments where English does not have obligatory marking for specificity and saliency, Yorùbá does, and so we get *kan* (specificity) and *náà* (salience).

1.1.3 Plural strategies

Chapter 6 discusses various strategies that Yorùbá adopts to mark plural. The first thing that this work shows is that plural marking is not obligatory. However, I demonstrate that there are three different ways by which plural marking is carried out. One way is through contextually determined plurality. These are the cases where there is no overt plural marking as such and a noun can be interpreted as singular or plural:

- (6) Táyé ní ajá
 T. have dog
 = ‘Taye has a dog.’
 = ‘Taye has dogs’

Another way is a semantically determined plurality. These are the cases where nouns take quantifiers and numerals that have an abstract [PLURAL] feature. Such nouns are unambiguously interpreted as plural. In (7a), there is the quantifier *díè* ‘few’ co-occurring with *ajá* ‘dog’ and in (7b) the numeral *méje* ‘seven’ co-occurs with the same noun and in both cases, the noun is interpreted as plural.

- (7) a. Táyé ra [ajá díè]
 T. buy dog few
 ‘Taye bought few dogs.’
- b. Táyé ra [ajá méje]
 T. buy dog seven
 ‘Taye bought seven dogs.’

The third category is the morphologically determined plurality. These are the cases when nouns are overtly marked by plural words. I show that there are two syntactic positions for morphologically determined plurality: the noun and a modifying element in a nominal expression. A noun is marked for plural by the use of the plural word *àwọn* as shown in (8).

- (8) Mo ra [àwọn ìwé] ní Kánádà
 1sg buy PL book Loc Place
 ‘I bought books in Canada.’

For plural marking on modifiers, this is realized through the COPY of a modifier, *gíga gíga* ‘tall tall’, as in (9).

- (9) [Ilé **gíga** gíga] wà ní Fànkúfà
 house COPY tall be LOC Vancouver
 ‘There are high-rises in Vancouver.’

The example in (9) contradicts claims that have been made in the literature to the effect that Yorùbá has only one plural word: *àwọn* (cf. Dryer 1989, Rowlands 1969). I moreover demonstrate that the multiple strategies of plural marking attested in Yorùbá are semantically driven.

1.2 Clause structure

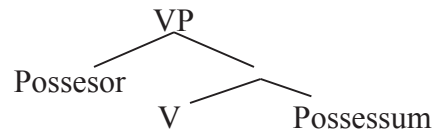
This section introduces the type of clause structure that is assumed for the analysis of Yorùbá genitive constructions: the small clause structure (§1.2.1) and the relative clause structure (§1.2.2). I then introduce Yorùbá DP structure (§1.2.3), and consider its relation to demonstratives (§1.2.4) and modification (§1.2.5).

1.2.1 Small clause¹

I propose a small clause (VP) along the lines of Stowell (1981) and subsequent works to account for “plain” nominal and verbal genitives. In the proposed structure, the possessor argument occupies the specifier of this functional projection, VP taking the possessum argument as its complement (cf. Bowers 1993, Svenonius 1994), as in (10). Within this approach, I further propose that V is covert in the nominal genitive constructions and it is represented as [Ø]. However, in verbal possessives, v is overt and realized as a possessive verb *ní* ‘have’.

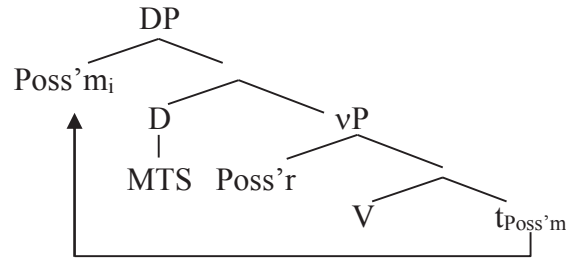
¹ Some of the ideas of small clause developed here are taken from “Introduction to Layers in DP” (Zamparelli 1995).

(10)



As I show, this vP introduces a DP layer, and the possessum NP moves to Spec DP where D is overtly realized as the genitive morpheme (the M-tone syllable) that relates the possessum and the possessor together in the surface syntax.²

(11)

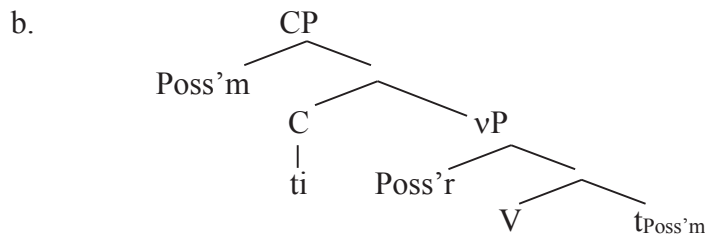


Syntactically, I argue that the relation (R) between the possessor and the possessum arguments must be mediated by a functional element. When this functional element is covert its complement semantically has to move to a “stronger” layer (Zamparelli 1995), i.e. the DP, where it is pronounced as a genitive DP. But when the functional element is overt the complement need not move.

1.2.2 Relative clause

The relative clause analysis adopted in this book accounts for genitive plus *ti* constructions. *Ti* constructions found within genitive DPs are analyzed as reduced relative clauses that lack an IP layer and where C is headed by a M-tone *ti*. This reduced CP is introduced above the small clause, as in (12).

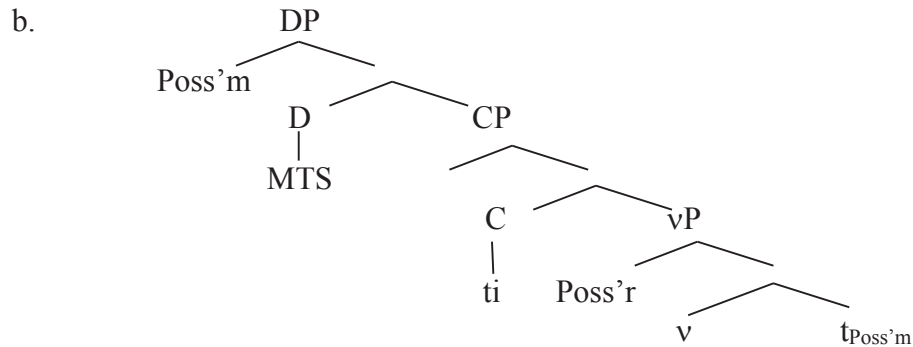
- (12) a. ère ti Kúnlé
statue C K.
'statue of Kunle'



² See Stowell (1981) for the adjunction analysis of arguments within a small clause.

In a genitive DP where the MTS and *ti* are both overt, there are three layers of phrases comprising the DP, the CP and the vP.

- (13) a. owó o ti Kúnlé
 money MTS C K.
 ‘Kunle’s money’



1.2.3 The Internal Structure of Yorùbá DP

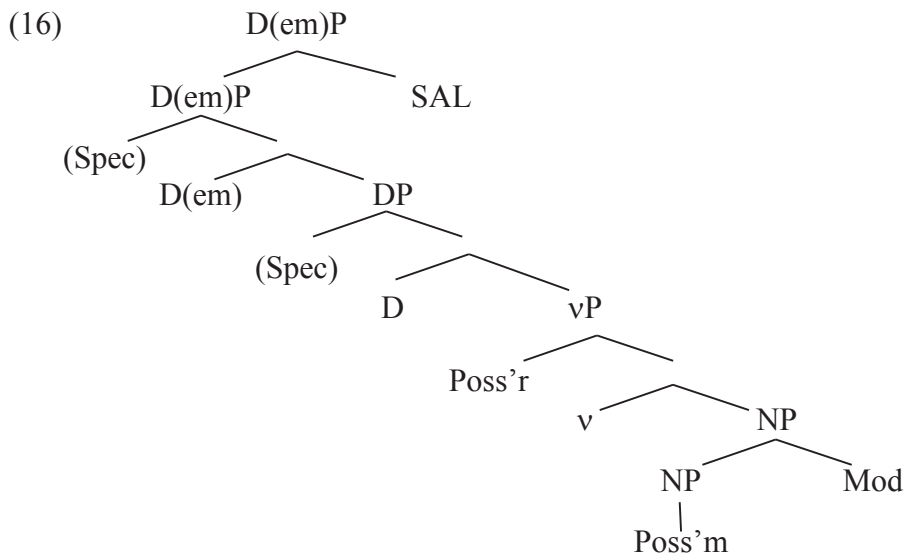
The first thing to observe is that Yorùbá surface ordering is usually head-initial, (14).

- (14) a. **V** DP jẹ iṣu
 ‘eat yam’
- b. **P** DP sí Fànkúfà
 ‘to Vancouver’
- c. **I** VP yóò jẹ iṣu
 ‘will eat yam’
- d. **C** IP pã mo jẹ iṣu
 that I eat yam

However, nominal expressions show mixed properties. Some nominals have head-initial ordering as in (15a), while others have a head-final ordering as in (15b).

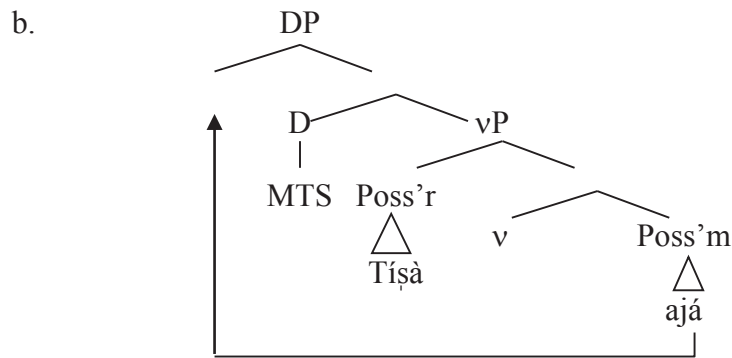
- (15) a. **Q** NP gbogbo ọmọ
 all child
 ‘all of the children’
- b. NP **Dem** ọmọ yìí
 child this
 ‘this child’

I propose that despite appearances, Yorùbá is consistently head-initial. This accords with Kayne's (1994) proposal that all languages have a Specifier-Head-Complement order (S-H-C). I propose that in Yorùbá, any departure from the Specifier-Head-Complement order arises from movement to a higher specifier. I give the full structure in (16). In (16), *Sal* refers to *salience* marker and is analyzed as an adjunct to D(em)P. See Chapter 5.



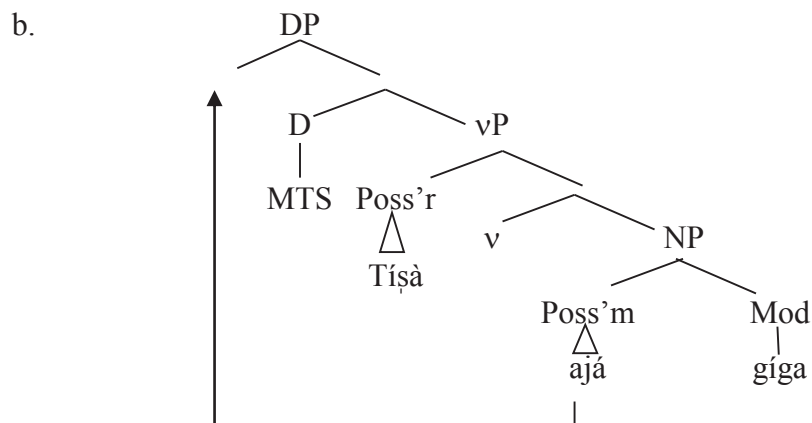
In the proposed structure, the highest nominal projection is D(em)P, which dominates DP. Thus, when we have a demonstrative within a nominal expression, the DP is the complement of Dem. The DP in turn dominates a small clause (vP), which contains the possessive phrase. As for modifiers, they are right adjoined to NP. What follows is a breakdown of this D(em)P structure. In (17a), the genitive DP contains only the Possessor and the Possessum with the intervening genitive marker. I propose that the Possessum moves to Spec DP in order to obtain the surface linear order of Possessum-Possessor, as in (17b).

- (17) a. ajá a Tíṣà
 dog MTS teacher
 'the teacher's dog'



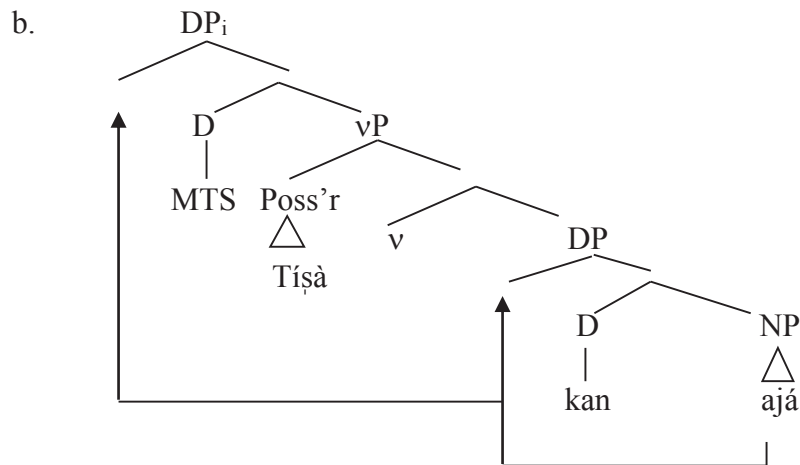
(18a) is a genitive DP whose Possessum takes a modifier. This modifier follows the Possessor in the surface syntax. But the modifier actually modifies the Possessum. The occurrence of the modifier after the Possessor is due to movement of the Possessum to Spec DP, as in (18b).

- (18) a. ajá a Tíṣà gíga
 dog MTS teacher tall
 ‘the teacher’s tall dog’



The genitive DP in (19a) has the specificity marker *kan* which modifies the possessum. In this case, the Possessum first moves to the Spec of its DP and further moves to Spec of the higher DP to derive the surface linear order where the specificity marker directly follows the Possessor, as in (19b).

- (19) a. ajá a Tíṣà kan
 dog MTS teacher SPF
 ‘the teacher’s certain dog (a certain dog of the teacher)’

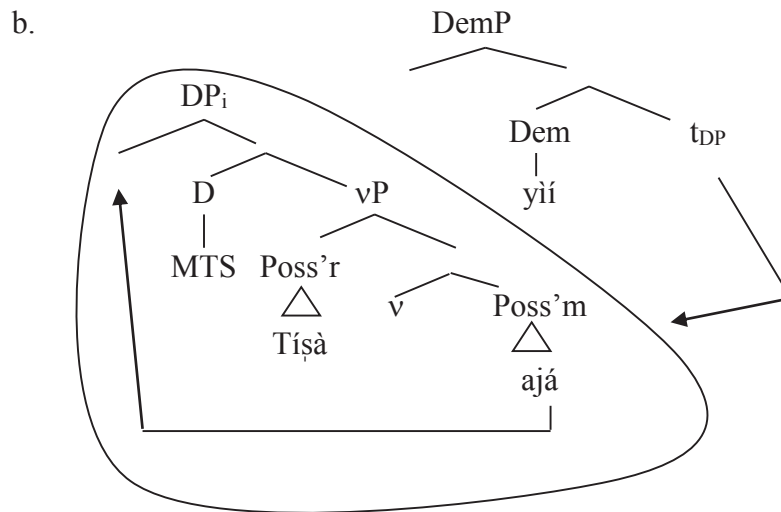


The genitive DP in (20) has a modifier *gíga* ‘tall’ and the salience marker *náà*. I treat both as adjuncts. The modifier modifies the Possessum. Assuming that the salience marker is in C-commanding relation to both the possessor and the possessum, I argue that it may mark either DP as salient, hence (20) is ambiguous between ‘the VERY dog’ or ‘the VERY teacher’.

- (20) [ájá a Tíṣà gíga náà]
 dog MTS teacher tall SAL
 (i) = ‘the VERY tall dog of the teacher’
 (ii) = ‘the tall dog of the VERY teacher’

Finally, in (21) is a DemP that contains a genitive DP. I treat the demonstrative as a functional head and propose that the whole genitive DP moves to Spec DemP. Observe that there is also a movement that is internal to the genitive DP, namely movement of the Possessum from the complement position of V to Spec DP.

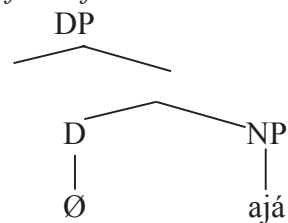
- (21) a. ájá a Tíṣà yîi
 dog MTS teacher Dem
 ‘this teacher’s dog’



1.2.3.1 DP and the D position

Yorùbá nouns can be bare in the sense that they need not have overt determiners. Yorùbá bare nouns may be construed as generic, indefinite, or definite. I propose that bare nouns that are construed as definite have a (null) discourse-linked determiner as in (22), in which case they may have the structure of a DP with a null D, which takes the NP as its complement (cf. Abney 1997, Longobardi 1994, and subsequent works).

(22) *Structure for definite construal of bare N*



1.2.3.2 Genitive structure in DP

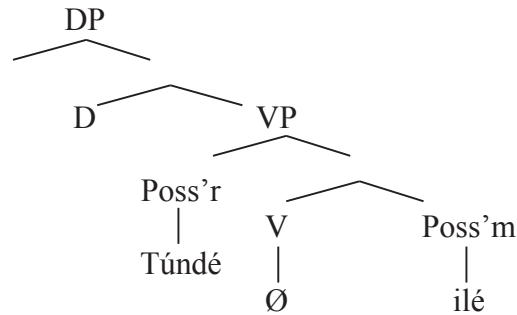
Yorùbá nominal genitive constructions are post-nominal in the sense that the possessor follows the possessum. In this case the possessors are marked for Genitive case by a mid tone vowel, henceforth referred to as MTS, which I analyze as the genitive marker.

(23) a. ilé e Túndé
 house MTS T.
 ‘Tunde’s house’

- b. ilé e rẹ̀
 house MTS 3sg
 'his house'

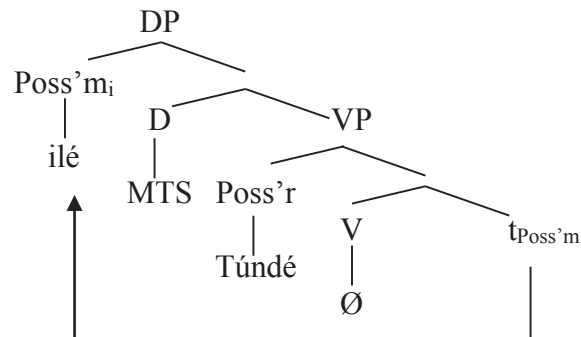
I claim that a genitive phrase has the structure of a DP whose D takes the small clause as its complement. The MTS occupies this D position.

- (24) Yorùbá Nominal Genitive DP



Observe that in the proposed structure, the possessor precedes the possessum in the VP. However in the surface syntax, the possessum precedes the possessor. To account for that linear order, I propose a raising analysis, which raises the possessum to Spec DP.

- (25) Yorùbá Nominal Genitive DP



1.2.4 D(emonstrative) and NP

Two types of elements fill the demonstrative position in Yorùbá. The first type, which I call basic demonstratives are *yíí* 'this' and *yen* 'that'. They can be marked for number by the prefix plural morpheme *wòn* (see Chapter 6).

- (26) a. ọmọ yẹn
 child Dem
 ‘that child’
- b. ọmọ wọnyẹn
 child Dem
 ‘those children’

The other type of element that occupies this position is the deictic element *kan* which marks nouns for specificity.

- (27) ilé kan
 house certain
 ‘a certain house’

I analyze *kan* as a deictic D glosses as SPF in (28). This proposal has support from the distribution of these elements: demonstratives and *kan* are in complementary distribution.

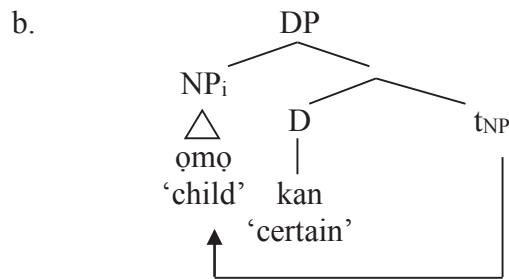
- (28) a. *ilé yìí kan
 house Dem SPF
- b. *ilé kan yìí
 house SPF Dem

Assuming Yorùbá is Head-initial for all phrases, I propose that movement of the NP to Spec DemP derives the surface ordering of demonstratives relative to the NP.

- (29) a.
-
- ```

graph TD
 DemP --> NP_i[NPi]
 DemP --> Complement
 NP_i --> Omọ[ọmọ]
 Omọ --- Child[‘child’]
 Complement --> Dem
 Complement --> tNP[tNP]
 Dem --> Yẹn[yẹn]
 Yẹn --- That[‘that’]
 tNP --> NP_i

```



### 1.2.5 Modification

Here, I gave a fairly detailed account of modifiers. This is because in the main part of the book, there is no separate discussion of this category other than in Chapter 6 where they are treated as a class of plural words. Yorùbá modifiers<sup>3</sup> appear after the noun that they modify:

- (30) a. [Ajá **dúdú**] jẹ egungun [NP Mod]  
 dog black eat bone  
 'The black dog ate the bone.'
- b. [Igi **ńlá**] wà ní igbó orò [NP Mod]  
 tree big be Loc forest sacred  
 'There are big trees in the sacred forest.'

These modifiers fall into four distinct semantic classes (31).

- (31) a. Colour Modifiers: {*dúdú* 'black', *funfun* 'white', *pupa* 'red' }  
 b. Dimension Modifiers: {*kékeré*, 'small' *kúkúrú*, 'short', *ńlá*, 'big'}  
 c. Quality Modifiers: {*burúkú* 'bad', *dára-dára* 'good', *lile* 'hard', *rere* 'good' *pàtàkì* 'important', *tuntun* 'new'}  
 d. Quantity Modifiers: {*diè* 'few', *púpò* 'many', + NUMERALS}

They show the ordering restrictions in (32).<sup>4</sup>

- (32) [*Colour* > *Dimension* > *Quality* > *Quantity*]

The following examples illustrate these co-occurrence restrictions. When there is

<sup>3</sup> Modifiers as used in this book are the adjectives (cf. Bámgbósí 1967; Awóbùlúyì 1978; Hawkins 1983; Aboh 1999, 2000; Cinque 2004; Dixon 2004; Lindsey and Scancarelli 1985). On the division of this category into open class versus closed class, see Cinque (2004, 2005).

<sup>4</sup> However there is some variation in these restrictions as some of the starred orders are acceptable to some speakers of Yorùbá.

more than one modifier, in an NP such that colour is among them, the colour modifier must precede any of the other modifiers, with dimension in (33a), quality (34a), and quantity, (35a).

- (33) a. *Colour > Dimension*  
 Mo ra ajá [dúdú kékeré ]  
 1sg buy dog black small  
 ‘I bought a small black dog.’
- b. *\*Dimension > Colour*  
 \*ajá [kékeré dúdú]
- (34) a. *Colour > Quality*  
 Olú kò fẹ ọmọbinrin [dúdú burúkú] yẹn  
 O neg marry girl black bad Dem  
 ‘Olu did not marry that nasty dark-in-complexion girl.’
- b. *\*Quality > Colour*  
 \*ajá [burúkú dúdú]
- (35) a. *Colour > Quantity*  
 Ìyá oníso-ẹran ní ajá [dúdú púpò]  
 mother animal-trader have dog black many  
 ‘The woman who trades in domestic animals has many black dogs.’
- b. *\*Quantity > Colour*  
 \*ajá [púpò dúdú]

With dimension, quality, and quantity modifiers, dimension must precede both quality (36a) and quantity (37a).

- (36) a. *Dimension > Quality*  
 N kò fẹ ajá [kékeré burúkú] yìi  
 1sg neg want dog small bad Dem  
 ‘I do not want this ugly small dog.’
- b. *\*Quality > Dimension*  
 \*ajá [burúkú kékeré]
- (37) a. *Dimension > Quantity*  
 Mo ra iṣu [ńlá díẹ]  
 1sg buy yam big few  
 ‘I bought few big yams.’

- b. *Quantity > Dimension*  
 \*iṣu [díè òlá]

Further, when quality and quantity both modify an NP, the quality modifier must precede the quantity modifier.

- (38) a. *Quality > Quantity*  
 Ajá [burúkú méje] wà ní ilú yí  
 dog bad seven be Loc town Dem  
 ‘There are seven terrible dogs in this city.’

- b. \*ajá méje burúkú

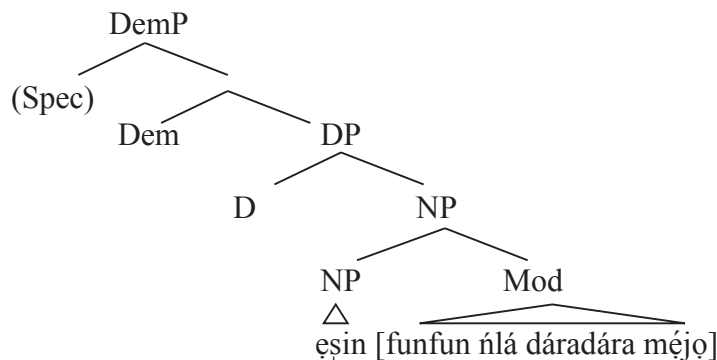
Finally, a combination of colour, dimension and quality with an NP shows the co-occurrence order in (39a); colour must precede dimension, which in turn must precede quality. Finally, when all the modifiers combine with an NP, the ordering restriction that must be followed is illustrated in (39b).

- (39) a. *Colour > Dimension > Quality*  
 Owó tẹ olúkó [dúdú kékeré burúkú] yẹn  
 hand reach teacher black small bad Dem  
 ‘That nasty small dark-in-complexion teacher is in trouble.’

- b. *Colour > Dimension > Quality > Quantity*  
 Oba á fún Gómìnà ní  
 king HTS give governor P  
 ẹṣin [funfun òlá dádádára méjọ]  
 horse white big nice eight  
 ‘The king gave the governor eight nice big white horses.’

I put forward two possible analyses of modifiers. They can either be analyzed as base-generated adjuncts or as functional heads. If modifiers are adjuncts, then this gives the structure in (40) assuming right adjunction (cf. Cinque 1993). The entire DP raises to Spec DemP.)

(40) hypothesis 1: *modifiers as base-generated adjuncts* (cf. Déchaine 1993)



The implications of modifier stacking for adjunct analysis is that one needs to stipulate a Yorùbá-specific modifier sequence: *Colour* > *Dimension* > *Quality* > *Quantity*; which is the mirror image of English modifier sequences.

- (41) a. Yorùbá modifier sequence: [*Colour* > *Dimension* > *Quality* > *Quantity*]  
 b. English modifier sequence: [*Quantity* > *Quality* > *Dimension* > *Colour*]

The examples in (42) and (43) illustrate the sequences in Yorùbá and English.

- (42) *Yorùbá*  
 Ọbá ra ẹṣin [funfun ńlá dádádára méjọ]  
 king buy horse **white** **big** **nice** **eight**  
 fún ààrẹ Ọbásanjọ  
 P president O.

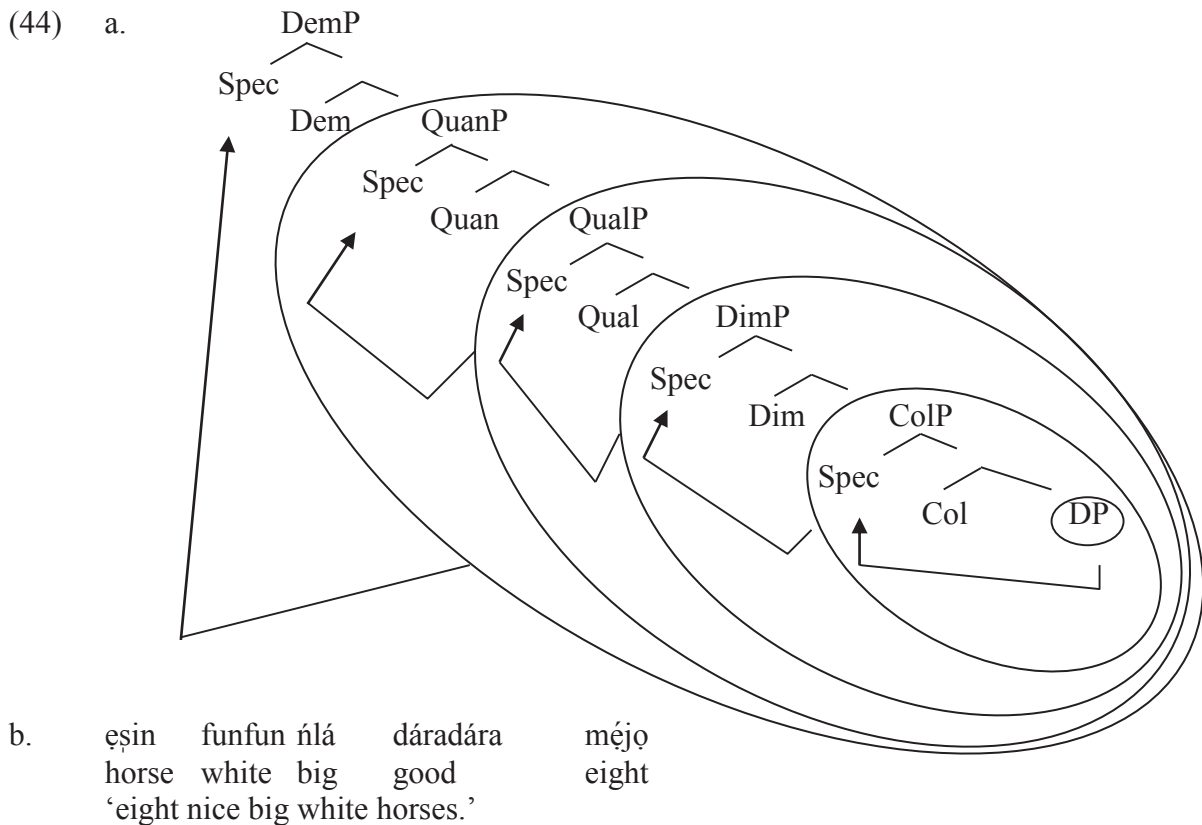
- (43) *English*  
 The king bought [**eight nice big white**] horses for President Obasanjo.

The mirror image ordering could be taken as evidence that syntactic movement has applied in Yorùbá. And if that is the case, it is a good case to make for an analysis that treats modifiers as functional heads, which introduce a DP complement.<sup>5</sup> The analysis proceeds as follows. First the DP moves to Spec ModP and second, the ModP raises to Spec DemP. This corresponds to “snowball” movement (Aboh 1999).

Snowballing as developed in Aboh (1999, 2004) is a syntactic mechanism that allows pied-piping of a maximal projection. In particular, it involves leftward

<sup>5</sup> Consistent with the idea that modifiers are functional heads is the fact they form a closed class in Yorùbá (Abraham 1958; Bámgbósé 1967; Welmers 1973; Awóbùlúyí 1978).

movement of an NP to the specifier position of a higher phrase, call it YP, and the whole YP which now harbors the NP and its complement moves to the specifier position of yet another higher phrase, call it XP. Depending on the number of intervening functional heads, snowballing continues until it gets to the Spec of the highest phrase. This contrasts with cyclic movement, which involves movement of a given phrase to higher specifier positions in a successive manner without having to be accompanied by the intervening host at the intermediate landing sites. For details, see Aboh (1999, 2004). The tree structure in (44) illustrates how the snowball movement derives the Yorùbá data above.



I retain the adjunct-based analysis of modifiers because it is able to account for why plural words/morphemes must adjoin to the lexical items they pluralize (Chapter 6).

In summary, this chapter has introduced us to the four related topics on nominal expressions in Yorùbá that I cover in the entire book as well the analyses that account for each of them. In the following chapters, I provide both empirical and theoretical evidence for each proposal.



## Chapter 2

### Yorùbá Genitive Constructions

---

#### 2 Introduction

This chapter discusses genitive constructions in Yorùbá. It explores four themes. §2.1 accounts for the semantics of the relation between the two arguments that are in a genitive construction, i.e., the R-relation. In §2.2, I present the syntax of the R relation, while the focus of §2.3 is the syntax of Yorùbá nominal genitives. The concern of §2.4 is how the syntax of Yorùbá nominal genitives interacts with phonology. I conclude my findings in §2.5.

#### 2.1 The semantics of the R-relation

The terms “genitive” and “possessive” as used in this book refer to constructions where two simple nouns enter into a relation with one another (Storto 2003). I first show in §2.1.1 that the R-relation is either pragmatically determined (via discourse-linking) as in (1) or lexically determined via the inherent meaning of relational nouns and inalienable body-part nouns, as in (2). In this case it is the inherent meaning of the possesum that determines the kind of relation that holds between it and the possessor.

- (1)    iwé    e        Túndé                      *discourse-linking*  
         book MTS T.  
         ‘Tunde’s book’
- (2)    a.        bàbá    a        Túndé                      *relational noun*  
         father MTS T.  
         ‘Tunde’s father’
- b.        apá     a        Túndé                      *inalienable body-part noun*  
         arm    MTS T.  
         ‘Tunde’s arm’

I then address the distinction between the terms “possessive” and “genitive”: while the former describes the semantics of the R-relation (§2.1.1), the latter describes the



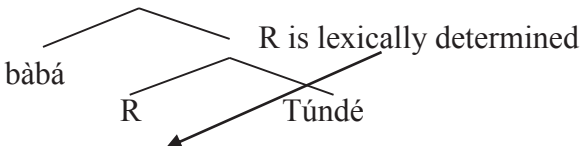
- 
- (5) a.      ilé      e      Túndé      *genitive of possession*  
          house MTS T.  
          ‘Tunde’s house’
- b.      àwòrán      an      Túndé      *genitive of depiction*  
          picture      MTS T.  
          ‘John’s picture’
- c.      ògbóntagi      oníròyìn      *genitive of modification*  
          gem      journalist  
          ‘a gem of a Journalist’

These three subtypes of genitive construction are all instances of the relation R. I concentrate mainly on the genitive of possession and the genitive of depiction in this book.

In addition to these pragmatically determined R-relations, another R relation is found with relational nouns like *bàbá* ‘father’, where the relation is supplied by the meaning of the noun itself. Thus, R is lexically determined. In (6), under its most salient reading, *bàbá* means ‘someone who stands in the father-of relation’. ‘Tunde’s father’ doesn’t need a discourse context for the relation to be understood: the person in question is unambiguously understood to be the one who stands in the father-of relation to Tunde (cf. Déchaine 1993: 127).

- (6) a.      bàbá      a      Túndé  
          father MTS T.  
          ‘Tunde’s father’
- b.       $\exists x$  [father (x)  $\wedge$  bàbá (x,T)  
          = There exists x, x is bàbá ‘a father’ and that x is the father of Tunde

When we say that R is lexically determined, the idea is that for relational nouns such as *bàbá* ‘father’, it is the noun itself that supplies the relation R, as in (7).<sup>1</sup>

- (7)      *Relational Nouns*
- =      

---

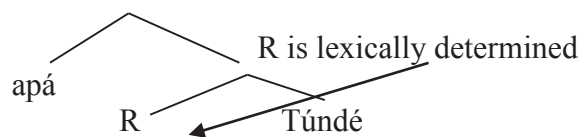
<sup>1</sup>However, discourse linking is also possible with relational nouns in an appropriate context. Imagine the following scenario. “Every member of a community centre’s ‘Father’s Group’ was assigned a counselor. Counselor Tunde’s father was very enthusiastic about the centre’s program but Counselor Titi’s father had no real interest in the group at all.” In this context, discourse linking would take precedence over the kinship interpretation. However, such forced contexts are not considered here.

The third type of R relation is found with inalienable nouns, which include body-part nouns such as *apá* ‘arm’ (8) (cf. Vergnaud and Zubizarreta 1992; Mühlbauer 2004).

- (8) a.      *apá*    *a*      *Túndé*  
          arm    MTS    T.  
          ‘Tunde’s arm’
- b.       $\exists x [\text{arm}(x) \wedge \text{apá}(x, T)]$   
          = There exists *x*, *x* is *apá* ‘an arm such that *x* is the arm of Tunde’

Such inalienable nouns have a special part-of relation (Déchaine 1993: 127-133; Mühlbauer 2004a,b; 2005; Partee and Borschev 1999). Observe that the inalienable R relation is not discourse linked. Thus, as with relational nouns, the inalienable R relation is also lexically determined as in (9). In *apá a Túndé* ‘Tunde’s arm’, this means the arm that is a part of Tunde. It’s a component of his body, under its most salient reading.<sup>2</sup>

- (9)      Inalienable Nouns



To summarize, simple N possession has an open semantic relation *R* whose content is provided by the context (i.e. pragmatically determined). For the other two types of genitives, namely relational nouns and inalienable body part nouns, the *R* relation is lexically determined.

### 2.1.2 “Possessive” versus “Genitive”

Attempts have been made to draw a distinction between “possessive” and “genitive” in the literature. For example, in semantics (Borer 2004), this kind of phrase is referred to as possessive because the focus is on meaning. Once possessive is mentioned, semantic consideration necessarily comes in, whereas “genitive” denotes a morphosyntactic (not semantic) relationship between a nominal and some other item (be it noun or verb). Following standard practice, I analyze genitive in terms of Case<sup>3</sup> (Lindauer 1998).

<sup>2</sup> See Burton (1995) for a discussion of the less salient readings of inalienable nouns.

<sup>3</sup> There is even a trend to decompose possession syntactically into location, BE and HAVE. See Benveniste (1971); Freeze (1992); Harley (1995); Partee and Borschev (2002).

Following from what is said above, one might conclude that the terms “genitive” and “possessive” are different names for the same kind of nominal expression.

Observe that just as the nominal R relation is compatible with a wide range of pragmatically conditioned interpretations, as in (10a), so too is the verbal R relation, as in (10b).

- (10) a. nominal R-relation (possessor/genitive)  
         ìwé e Tùndé  
         book MTS T.  
         (i) ‘the book that Tunde owns’  
         (ii) ‘the book that Tunde wrote’  
         (iii) ‘the book about Tunde’
- b. verbal R-relation (possessor/genitive)  
         Tùndé ní ìwé  
         T. have book  
         (i) ‘Tunde owns a book’  
         (ii) ‘Tunde wrote a book’  
         (iii) ‘Someone wrote a book about Tunde’

Furthermore, just as lexical properties of nouns determine the R-relation, so too do lexical properties of arguments determine the relation expressed by a light verb.<sup>4</sup> For example, in (11a), the R-relation is pragmatically determined by discourse-linking, while in (11b-c) the R-relation is determined by the lexical properties of the relation and inalienable noun respectively.

- (11) a. **bàtà** a Tùndé *discourse-linking*  
         shoe MTS T.  
         ‘Tunde’s shoes’
- b. **ègbón** ọ̀n Tùndé *relational*  
         elder MTS T.  
         ‘Tunde’s brother’
- c. **apá** a Tùndé *inalienable*  
         arm MTS T.  
         ‘Tunde’s arm’

<sup>4</sup>I define light verbs as verbs whose meaning and valence are determined exclusively by nouns with which they combine.

Similarly, in (12) it is the inherent lexical properties of the object argument that determine how light verb *jẹ* ‘eat, ingest’ is interpreted. In (12a), *jẹ iṣu* translates to ‘eat yam’; in (12b) *jẹ gbèsè* translates literally as ‘eat debt’, i.e. to be in debt; in (12c) *jẹ ẹgba* ‘eat cane’ translates as ‘to be caned’. Thus, just as the co-argument relation between [ARG1 v ARG2] is determined by the lexical properties of [ARG2] in the Possessive/genitive constructions of (11), so too is the co-argument relation between [ARG1 *jẹ* ARG2] determined by the lexical properties of [ARG2] in (12).

- (12) a. Bólú jẹ **iṣu** *agent-theme*  
           B. eat yam  
           ‘Bolu ate yams.’
- b. Bólú jẹ **gbèsè** *experiencer-theme*  
           B. eat debt  
           ‘Bolu is in debt.’
- c. Bólú jẹ **ẹgba** *experiencer-theme*  
           B. eat cane  
           ‘Bolu received some strokes of cane.’

In Yorùbá, it is possible to have a genitive relation without possession. Conversely all cases of nominal possession show some kind of genitive relation. In (13a), *àpò* ‘a bag’ cannot be possessed by *bàtà* ‘shoes’ in any obvious way, although the shoes stand in a relation to the bag, e.g. by occupying the bag in spatial terms. But even though possession as such is not found in (13a) it is no less genitive than (13b) which can have a clearly possessive construal along the lines of ‘the money that Tunde has’.

- (13) a. [àpò o bàtà]  
           bag MTS shoe  
           ‘a bag of shoes’
- b. [owó o Túndé]  
           Money MTS T.  
           ‘Tunde’s money’

Based on (13), the conclusion must be that the notion of possession is slightly different from that of genitive.

Another case to consider is shown in (14). In (14a), both nouns are animate. In that case *Túndé* does not possess his boss, but instead the genitive simply allows

for the satisfaction of the R-relation, since if you are a boss, you must be somebody's boss. Further, there are cases like (14b) where *apá* 'arm' contextually means 'sleeve'; metaphorically the gown can be thought to possess the sleeve just as I possess my own arm via the part-whole relation (cf. Mühlbauer 2004; Partee and Borschev 1999).

- (14) a. [ògá a Túndé]  
           master MTS T.  
           'Tunde's master'
- b. [apá (a) agbádá]  
           arm MTS garment  
           'a garment's sleeve'

What is reported of the genitive and possessive parallels the case of nominative Case and the external theta-role of the verb. While many arguments with nominative Case are also agents, and many agents bear nominative Case, the correlation is not on one-to-one basis. For example, in (15a), *Jenrola* is agent, in (15b) the same *Jenrola* is the experiencer, whereas in (15c) *Jenrola* is the possessor. In all three examples, *Jenrola* is assigned Nominative Case.

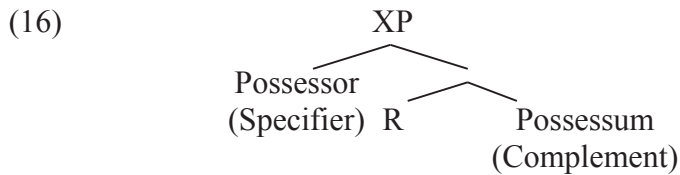
- (15) a. Jẹnrólá jẹ àkàrà  
           J. eat bean cake  
           'Jenrola ate the bean cake'  
           Θ: Agent  
           Case: Nominative
- b. Jẹnrólá fẹràn àkàrà  
           Jenrola likes bean cake  
           'Jenrola likes bean cakes.'  
           Θ: Experiencer  
           Case: Nominative
- c. Jẹnrólá ní àkàrà  
           J. have bean cake  
           'Jenrola has a bean cake.'  
           Θ: Possessor  
           Case: Nominative

Delsing (1998:93-94) observes that though "the relation between possessor and possessum is semantically different from the relation between the subject and the verb, it seems to be morphosyntactically the same relation." On that view, genitive may be defined in terms of structural Case.

### 2.1.3 Possessor and Possessum

The other two terms that I will frequently use are Possessor and Possessum. A possessum NP does not necessarily mean an item possessed by X. Neither is it the case that a possessor NP always refers to the one who possesses X. Rather, they simply represent the two arguments that are in a genitive relation.

In the structure that I propose, which for now I call XP, the Possessor occupies the Specifier position in the base structure whereas the Possessum is in the complement position.



I claim that this Possessor-Possessum structure is the basis of all genitive constructions in Yorùbá.

### 2.1.4 The three types of genitive constructions in Yorùbá

There are three kinds of genitive constructions in Yorùbá:

- (17)
- a. Nominal genitive
  - b. Verbal genitive
  - c. Nominal plus *ti* construction

The examples in (18) illustrate these three types. In (18a) the possessum and the possessor are separated by a mid tone mora ( $\mu$ ) herein referred to as the genitive marker (henceforth mid tone syllable (MTS)). The example in (18b) is the sentential counterpart of (18a). It is the kind of possessive that is assigned by the verb *ní* 'have'. Similarly, the example in (18c) parallels the example in (18a) in the sense that the possessum and the possessor are also separated by a mid tone element, here *ti*.

- (18)
- |    |                                                                                 |                                       |
|----|---------------------------------------------------------------------------------|---------------------------------------|
| a. | <i>Nominal genitive</i><br>ilé e Túndé<br>house MTS T.<br>'Tunde's house'       | <i>possessum    MTS    possessor</i>  |
| b. | <i>Verbal genitive</i><br>Túndé ní ilé<br>T. have house<br>'Tunde has a house.' | <i>possessor    verb    possessum</i> |



- c. *Nominal plus ti construction*  
 ẹran ti Tùndé                      *possessum*    *C*    *possessor*  
 animal of T.  
 ‘Tunde’s animal’

In what follows, I sketch out a syntactic analysis of the R relation. After that, I proceed to account for the first two types of genitive constructions shown in (18a-b), namely nominal genitives and verbal genitives. The third type of genitive construction, namely the nominal plus *ti* construction, is treated in Chapter 3.

## 2.2 The syntax of the R-relation

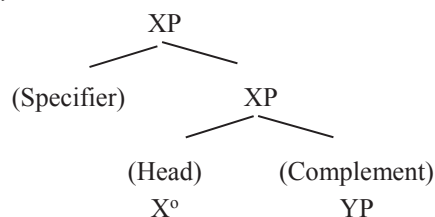
A genitive construction establishes a relation R between two nouns: the possessor and the possessum. The syntax of the Possessor-Possessum relation is treated in one of two ways in the literature. On one view, the Possessor-Possessum relation corresponds to a co-argument structure in the syntax (Kayne 1993, 1994; Cinque 2003 among others). On another view, the Possessor-Possessum relation corresponds to a Head-Complement structure in the syntax (Jakendoff 1977). I discuss both proposals and adopt the co-argument analysis for Yorùbá.

### 2.2.1 Possessor-Possessum as a co-argument relation

The co-argument relation analysis that I adopt is found in Kayne (1994). In this approach an abstract head mediates the relationship between the two arguments. Motivating a unified analysis for genitive constructions, Kayne (1994) argues that both pre-nominal and post-nominal genitives derive from one source.<sup>5</sup> The examples in (19) with the corresponding structures in (20) illustrate this.

<sup>5</sup> In the Linear Correspondence Axiom (LCA), Kayne (1994) claims that “Heads must always precede their associated complement position...specifier positions must invariably appear to the left of their associated head never to the right” (Kayne 1994: xiii). This proposal makes the claim that the universal ordering between a head and its dependents is Specifier-Head-Complement (S-H-C), as in (i).

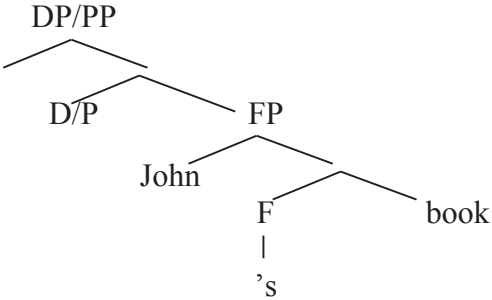
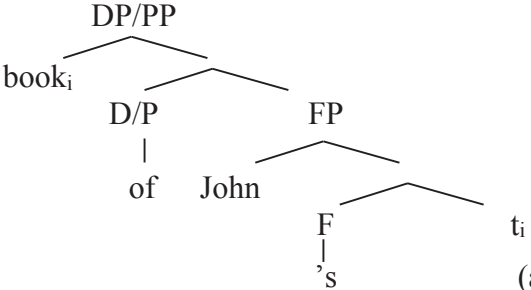
(i) *Kayne’s 1994 LCA*



YP, the complement of  $X^\circ$  is a sister to this Head and is dominated by the XP. This implies that the kind of linear order that one would expect assuming this structure will be such that a complement must always follow its associated head and that specifier always precedes the phrase it is sister to thus giving S-H-C linear order.

- (19) a. John's book: [DP...D° [John [ 's book]]]  
 b. book of John: [DP...book<sub>i</sub> [D of [John [ 's t<sub>i</sub>]]]]

The structure in (20a) base generates the prenominal genitive that is marked by the Saxon genitive 's. To derive the post-nominal genitive, Kayne assumes that a D/P layer is introduced and the possessum moves to Spec DP/PP while 'of' occupies D/P; as in (20b).

- (20) a. 
- b. 
- (adapted from Kayne 1994)

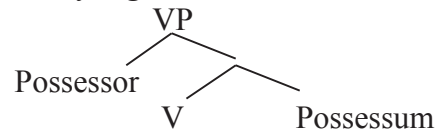
In this book, following Kayne's proposal, I assume that all Yorùbá genitives originate from the same base phrase structure. This phrase structure consists of the possessor and the possessum, which stand in a co-argument relation.

### 2.2.1.1 Base structure for Yorùbá genitives

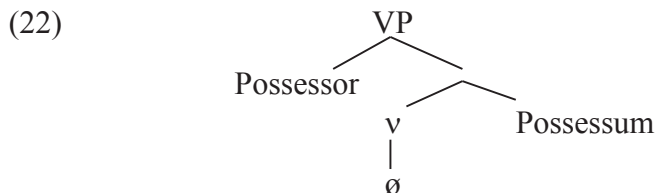
I propose a small clause VP as the base structure for all genitive phrases in Yorùbá along the lines of Stowell (1981, 1983), Chomsky (1981), Haegeman (1991), Déchaine (1993), and Radford (1997) among others. First, I define a 'Small Clause' as a defective nominal or verbal clause containing two arguments and a relational head that may but need not be pronounced (cf. Stowell 1981, 1983, Chomsky

1981).<sup>6</sup> On this assumption, the possessor, which is one of the arguments, occupies Spec vP and the possessum, which is the other argument, is the complement of this relational Head (V), as in (21). Observe that this structure parallels the relational structure above. Thus V is the syntactic counterpart of the semantic R relation.

(21) *Base Structure for genitive constructions*



There are two things that need to be pointed out. First, the same structure can account for both nominal and verbal possessives. Second, the relational head can be an abstract *v* in which case it is covert, i.e. a null relational verb (cf. Radford 1997: 201). It can also be a lexical head in that case it is overt (cf. Freeze 1992, Kayne 1993 and Harley 1995). Precisely, when the vP is a defective nominal clause, I propose that *v* is null, as in (22).<sup>7</sup>



On the other hand when vP is a verbal clause, *v* is pronounced as a possessive verb, as in (23).

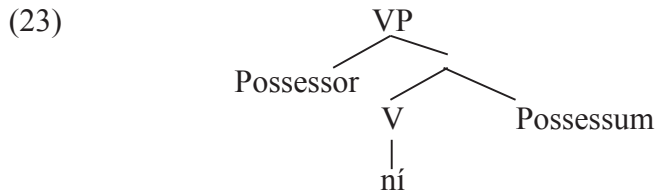
<sup>6</sup> In the cited works, the phrases in brackets in (i) are arguably small clauses, with the subject argument in boldface.

- (i) a. I consider [**John** a friend]  
 b. I expected [**Serena** to win the tournament]

The other type of small clause according to Stowell (1978), Couquaux (1982), and Burzio (1986) consists of copular sentences, which have their base as small-clauses under “be” in IP. The example in (ii) illustrates this. The idea is that (ii-a) originates as a small clause in (ii-b), and that the argument raises to [Spec IP] to satisfy the Extended Projection Principle and get Case ii-c).

- (ii) a. John is the best man in town.  
 b. [IP is [SC [John] [the best man in town]]]  
 c. [[John]<sub>i</sub> is [SC *t<sub>i</sub>* [the best man in town]]] (Zamparelli 1995)

<sup>7</sup> Assuming that the R-relation corresponds to a head, we expect that in compounding of the type *bookstore* such a head is present as well. Possible evidence for such a head might come from German where in many of such compound we find an interfix *Hahn-en-fuss* (rooster leg) (Wiltschko personal communication).



The split between overt V (*ní*) and covert V ( $\emptyset$ ) in Yorùbá has empirical support from language-internal evidence. It reflects a general parallelism that occurs between N and V.

Further, as I demonstrate, the fact that *v* is null in a defective nominal clause leads to the obligatory raising of the possessum from the complement position to a higher position from where it can receive Case.

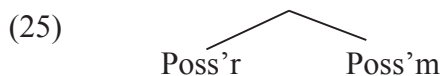
The “VP” label taken at surface value may seem to be misleading since not all genitives can be described as verbal predicates. However, in this book I use it as a cover term that refers to the base structure for nominal or verbal possessives. I could as well propose a different label like *nP* for the defective nominal clause, but I choose not to for the sake of capturing the generalization. With one base structure I have been able to show that there is the same relation (R) between two arguments in both nominal and verbal possessives. Thus, the head *v* is the syntactic equivalent of the R that relates the possessor to the possessum in semantics (cf. Hertz 1997: 513).

Note that the specific label used for genitive constructions is not of any serious concern or problem to linguists, as reflected by the fact that there is no uniform label in the literature. For example, in many of the articles that appear in Alexiadou and Wilder (1998), which treats possessive constructions across languages, this phrase is mostly referred to as “Possessive”, with “Poss” as the head, (24a). In Abney (1987), and Siloni (1997), the same construction is called a DP, and the Saxon genitive ’s is treated as D, a functional element, which introduces another argument, (24b). In Hertz (1997) it is simply called an NP, (24c). Yet it is possible to label a genitive phrase simply an FP where “F” is an unspecified functional morpheme, (24d) (cf. Fukui 1986). Lastly, the same phrase has been referred to as an AgrP (Kayne (1994) where the possessor occupies the Spec AgrP and the possessum serves as the complement of the Agr, (24e). The aim of labeling a possessive phrase an AgrP is to show that there is some kind of agreement between the functional element and the NP in its Spec. Such proposal is unquestionable in languages that show agreement. The present proposal identifies R with a null *v* in nominal contexts, (24f).

---

|      |    |                                                                       |                         |
|------|----|-----------------------------------------------------------------------|-------------------------|
| (24) | a. | [ <sub>POSSP</sub> POSS'r [ <sub>POSS</sub> ] [ <sub>POSS'm</sub> ]   | Alexiadou & Wilder 1998 |
|      | b. | [ <sub>DP</sub> POSS'r [ <sub>D</sub> 's ] [ <sub>POSS'm</sub> ]]     | Abney 1987, Siloni 1997 |
|      | c. | [ <sub>NP</sub> POSS'r [ ] [ <sub>POSS'm</sub> ]]                     | Hertz 1997              |
|      | d. | [ <sub>FP</sub> POSS'r [ <sub>F</sub> 's ] [ <sub>POSS'm</sub> ]]     | Fukui 1986              |
|      | e. | [ <sub>AgpP</sub> POSS'r [ <sub>Agp</sub> 's ] [ <sub>POSS'm</sub> ]] | Kayne 1994              |
|      | f. | [ <sub>VP</sub> POSS'r [ <sub>v</sub> Ø ] [ <sub>POSS'm</sub> ]]      | present proposal        |

The other question that may arise is why can't we have a simple structure such as (25) where the possessor and possessum are simply sisters to each other?

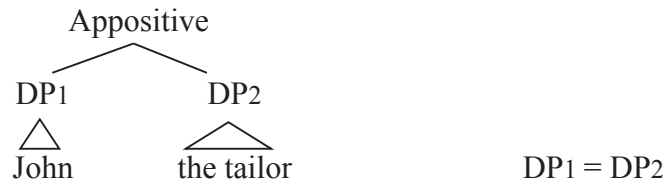


First, the small clause analysis proposed here accounts for both nominal and verbal genitives with the same structure. The structure in (25) has no place for verbs. I have argued that a genitive phrase involves a relation (R) between two arguments (possessum and possessor) mediated by an intervening head, which may be overt or covert. The binary structure in (25) does not show such a relation. In syntax, the relationship between two non-identical entities such as the one under review is best expressed through the use of an intervening head, which projects its own phrase. In my view, the structure in (25) is tenable when the two nouns refer to one entity such that one is saturating the other, as in the case of appositives in the English examples in (26); or with identificational statements such as (27) and (28) from Blackfoot and Cree respectively.

- (26) a. [John the tailor] is here.  
       b. I saw [my friend Jeff].
- (27) Anná Jeff                      Blackfoot (Algonquian)  
       this J.  
       ‘That is Jeff.’                (Mühlbauer, personal communication)
- (28) Minôs awa                      Cree (Algonquian)  
       cat this  
       ‘This is a cat.’                (Mühlbauer, personal communication)

The corresponding structure for the English example in (26a) is given as (29).

(29)



However, genitive constructions are quite different from appositives, as there is a non-identity condition in the sense that the nouns that stand in the R relation are two distinct entities: one the possessor, the other the possessum. Thus in *Jeff's dog*, "Jeff" can be represented as "y" while "dog" can be represented as "x" in which case, "y ≠ x".

In nominal genitives, Yorùbá has a genitive marker in the form of a Mid Tone Syllable (MTS) that shows up between the two arguments.<sup>8</sup> The presence of the MTS correlates with the fact that an R-relation holds between the nouns even though the MTS is not pronounced in "v", the syntactic head for the two arguments. Evidence for this claim comes from "v" which is pronounced as *ní* in verbal genitives.

- (30) a.      ìwé      e      Tùndé  
               book    MTS    T.  
               'Tunde's book'
- b.      bàbá    a      Tùndé  
                   father MTS    T.  
                   'Tunde's father'
- c.      apá      a      Tùndé  
                   arm    MTS    T.  
                   'Tunde's arm'

<sup>8</sup>Note that it is not in every language that the genitive marker shows up between the possessor and the possessum. In Hungarian the genitive *-ja* marker comes after the possessum.

- (i) a.      a te kalap-**ja**-i-d  
               the you hat-POSS-PL-eSG
- b.      (a) Mari kalap-**ja**-i-Ø  
               the Mary hat-POSS-PL-3SG  
               'Mary's hats'      (Alexiadou and Wilder 1998: 3, ex.3)

There is language-internal evidence in support of the type of structure that I propose. In verbal possessives, the two arguments are related by the intervening verb, which I claim is the spell-out of the relational *v*.

- (31) a. Tùndé ní iwé  
           T. have book  
           ‘Tunde has a book.’  
       b. Tùndé ní bàbá  
           T. have father  
           ‘Tunde has a father.’  
       c. Tùndé ní apá  
           T. have arm  
           ‘Tunde has an arm.’

The fact that in verbal possessives *v* is pronounced is evidence that the possessor and possessum are in a co-argument relation. In the corresponding nominal possessives there is an abstract head linking the two nouns. The reason that a simple binary structure is inadequate as an analysis of genitive constructions therefore is that it consistently involves the presence of two referentially dependent nouns.

### 2.2.1.2 Other languages with overt genitive morphemes

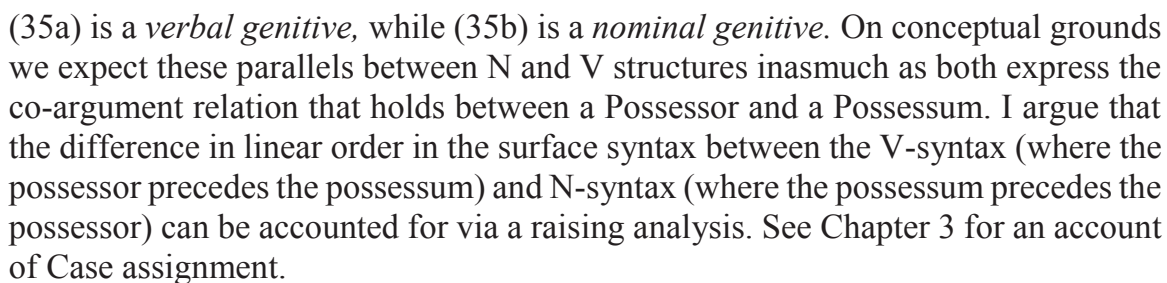
There is also cross-linguistic evidence in support of the small clause structure as there are a lot of languages that have overt morphemes for the genitive marker, e.g. Hebrew, Turkish, Japanese, Blackfoot and Cree among others. In (32a), the Hebrew Construct state is marked by *šel*. In (32b), the Japanese genitive marker is *no*. The same genitive marker is realized as *-m* and *-im* in Blackfoot (32c) and Cree (32d) respectively.

- (32) a. ha-bayit      šel      ha-‘iša      Hebrew  
           the-house      of      the-woman  
           ‘the woman’s house’      (Siloni 1997: 24 ex.10c)  
       b. masaru-**no**      hon      Japanese  
           masaru-Gen      book  
           ‘Masaru’s book’      (Kiyota, personal communication)  
       c. nisapikitsox      tsàatsi-**m**      Blackfoot  
           my      ring-poss  
           ‘my ring’      (Mühlbauer, personal communication)





(34) a.



### 2.2.3.1 Parallels between the verbal possessive and the nominal genitive

Languages have certain sentences that express possession. Such expressions of possession are in the sense of owner *HAVE* ownee relation (Kayne 1993, Harley 1995: 107, Manfredi 1994).<sup>9</sup> This translates to *possessor R possessum* in the present analysis. In this way, nominal possessives can be viewed as equivalent to verbal possessives. Thus, *John's book* is parallel to '*John has a book*' (Freeze 1992, Partee and Borshev 1999).

The parallel between V-possessive and N-genitive is also contained in the works of Szabolcsi's (1983) on Hungarian and Freeze (1992), Kayne's (1993, 1994) and Alexiadou and Wilder's (1998) work on English. In their analyses, the claim is that the possessive DP (36a) and the possessive clause (36b) are related as in (37). In the possessive DP, the possessor moves to Spec AgrP (37a). In the verbal possessive, the possessor first moves to Spec AgrP and then moves to Spec IP, (37b).

- (36) a. John's three books (are on the table). (A & W 1998: 6, 8a)  
       b. John has three books. (A & W 1998: 6, 8b)
- (37) a. [DP D<sup>o</sup> [John Agr<sup>o</sup> [QP/NP three books]]] (A & W 1998: 6, 9a)  
       b. [IP John<sub>j</sub> has [DP D<sup>o</sup> [t<sub>j</sub> Agr<sup>o</sup> [QP/NP three book]]]] (A & W 1998: 6, 9b)

In my analysis, I propose that the possessor raises to Spec, DP rather than Spec AgrP. Observe that Yorùbá verbal possessives are of two types: the canonical *ní* HAVE<sup>10</sup> construction in (38a), and the possessive dative *jé ti* ('be to') in (38b).

- (38) a. Tùndé ní ilé  
       T. HAVE house  
       'Tunde has a house.'
- b. Ilé jé ti Tùndé<sup>11</sup>  
       house be of T.  
       'The house belongs to Tunde.'

With nominal possessives, we observe a Possessum Possessor order, (39). This, we have seen before, the repetition here is for cross reference.

<sup>9</sup> The predicate element HAVE is interpreted in various ways in the literature: as auxiliary or verb (Kayne 1993), existential (Partee 2004, Szabolcsi 1994), locative or possessive (Freeze 1992)

<sup>10</sup> There is another verbal possessive *ní*. It is used in restricted context of 'his body' shown in (i).

(i) Èbùn ún ní ara a rẹ  
       E. HTS own body MTS 3sg  
       'Ebun owns her body.'

<sup>11</sup> This example is not discussed in this chapter because of its internal structure, especially the presence of the *ti*-element. See Chapter 3 for an account of *ti*-genitives.

- (39) ilé e Túndé  
 house MTS T.  
 ‘Tunde’s house’

If the parallelism between verbal and nominal genitives holds, one expects that verbal HAVE possessives will have the same structure as their nominal counterparts, as in (40).

- (40) a.
- 
- b.
- 

While the structure in (40a) is what is actually obtained in the surface syntax, (40b) is not attested, i.e. the MTS does not spell-out the relational  $\nu$ . As I show in the next section, although I still claim that both verbal and nominal genitives make use of the same base structure,  $\nu$  is not pronounced in nominal genitives in Yorùbá, and the MTS spells out a higher functional head (namely D) but I am assuming that whenever we have a genitive DP the  $\nu$  is there even though it is not pronounced.<sup>12</sup>

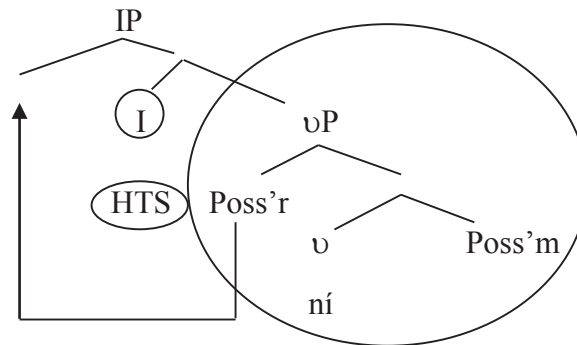
For verbal possessives, I adopt the base structure  $\nu$ P in (40a). I argue, based on the data presented, that the verb *ní* occupies  $\nu$  and takes the possessum *ilé* as its complement. On the other hand, *Túndé*, the possessor, occupies Spec  $\nu$ P (cf. Szabolsci 1983, Alexiadou and Wilder 1998). One final point that I want to make about the account of verbal possessives is that the **possessor NP** can raise out of Spec  $\nu$ P. In that case, there will be an IP layer above the base structure. In the nominal genitives, it is the **possessum NP** that raises out of the  $\nu$ P. This is a core difference between nominal and verbal genitives.

<sup>12</sup>The relation between D,  $\nu$  and R therefore is that at the semantic level, R is the head of the possession phrase. At the syntactic level, R is pronounced in  $\nu$  in verbal genitives whereas in nominal genitives, R is pronounced in D.

### 2.2.3.2 Parallels between IP-syntax and DP-syntax

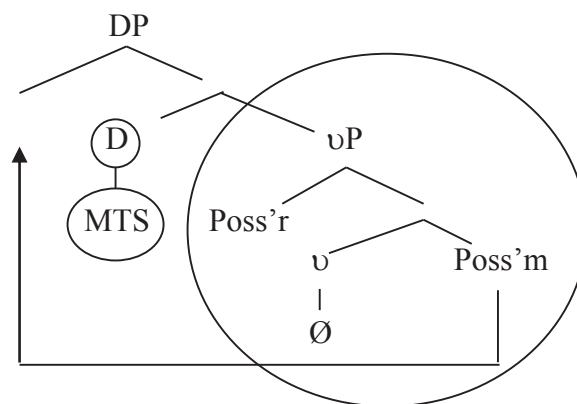
In this section, I present language-internal evidence in support of the proposed base structure based on the parallelism between IP-syntax and DP-syntax. This evidence comes from the grammatical particles that mark the two constructions. Recall that both the IP and the DP share the same base structure. In the IP domain, the head I(nfl) which is spelt out as HTS takes this  $\nu$ P base structure as its complement. Similarly, in the DP the head D, which is spelt out as MTS element takes the same  $\nu$ P base structure as its complement. One point that I want to emphasize about the account of verbal possessives is that the possessor raises out of the Spec  $\nu$ P to Spec IP to receive the NOM case, (41a). In nominal genitives, it is the possessum that raises to Spec DP to receive NOM/ACC Case depending on its syntactic position (41b). See Chapter 3 for details.

- (41) a. *IP-syntactic structure*



- b. Gbàdà            á            ní            ilé  
G.                HTS        have        house.  
'Gbada has a house.'

- 42 a. *DP-syntactic structure*



- b.      ilé      e      Gbàdà  
          house MTS G.  
          ‘Gbada’s house’

I claim that the MTS is a syntactically conditioned phonological spell out of an F-head within the nominal phrase, (DP). On the other hand, the HTS in “I” is a syntactically conditioned phonological spell out of an F-head within the sentential phrase (IP) (cf. Déchaine 1993 among others).<sup>13</sup>

In summary, I have established the existence of parallels between the verbal possessive and the nominal genitive. Languages have certain sentences that express possession in the sense of owner *HAVE* ownee relation, and this translates to *possessor R possessum*. I have equally established another parallel between IP-syntax and DP-syntax in support of the proposed base structure with evidence from the grammatical particles that mark the two constructions i.e., just as the head I(nfl) is spelt out as HTS and it takes this  $\bar{u}P$  base structure as its complement, the head D, which is spelt out as MTS element, takes the same  $\bar{u}P$  base structure as its complement.

### 2.3 The Yorùbá nominal genitive: syntax

In this section, I present a detailed syntactic account of Yorùbá nominal genitive constructions. First, I show that genitive constructions in this language involve a co-argument relation, §2.3.1. The analysis that I propose shows that the possessum NP must raise; §2.3.2. §2.3.3 gives various accounts of what determines movement of N or NP. The discussion in this section comes to an end in §2.3.4 with the account of genitive pronouns.

#### 2.3.1 Yorùbá genitive constructions involve a co-argument relation

My goal is to extend Kayne’s co-argument analysis to Yorùbá genitive constructions involving the M tone mora, the verbal element, the M tone *ti*, and relate the last to

<sup>13</sup> When the HTS occurs after the subject DP, it marks a non-future tense, (i). This contrasts with the presence of *yóò*, which marks the future tense, (ii). See Barczak (2004) for detailed discussion.

- (i)      Èbùn      **ún**      sùn  
          E.      HTS      sleep  
          = (a)      ‘Ebun is sleeping (+ present).’  
          = (b)      ‘Ebun slept.’
- (ii)      Èbùn      yóò sùn  
          E.      FUT sleep  
          ‘Ebun will sleep.’

This is the more reason why the two grammatical particles cannot co-occur, (iii).

- (iii)      a.      \*Èbùn      **ún yóò** sùn  
               b.      \*Èbùn      **yóò ún** sùn

the H tone *tí*. I argue that these morphemes are all functional heads, each of which takes a complement. I further show that Yorùbá supports an additional step that is not found in Kayne's analysis of English: movement of the possessum NP from Spec CP to Spec DP in a reduced relative clause. The latter is discussed in Chapter 3.

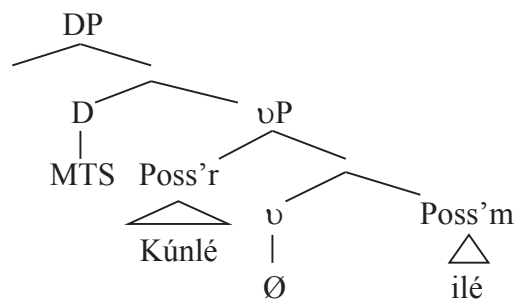
### 2.3.2 Possessum raising in Yorùbá genitive constructions

The base structure adopted for the account of genitive constructions would imply that the possessor NP precedes the possessum NP. However in the surface syntax (43), the possessum NP actually precedes the possessor NP.

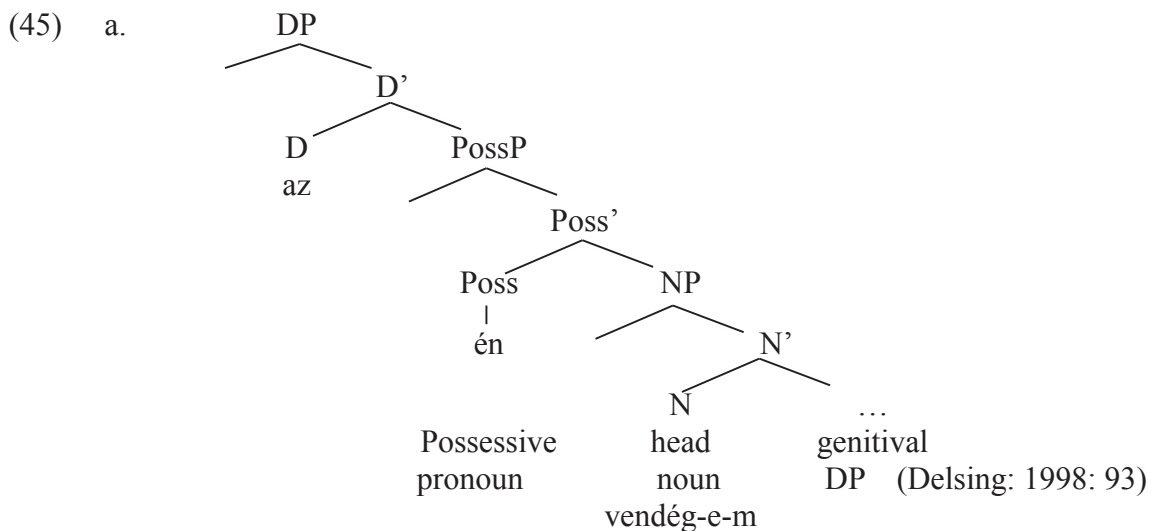
- (43) a.      òjé      e      Tùndé  
           trick   MTS   T.  
           'Tunde's tricks'
- b.      pátá      a      Bùnmi  
           pants   MTS   B.  
           'Bunmi's pants.'
- c.      ọkọ      ọ      Tòṇà  
           vehicle MTS   T.  
           'Tona's vehicle'
- d.      apá      a      Kúnlé  
           arm     MTS   K.  
           'Kúnlé's arm'

I take this to indicate that the possessum NP raises to the specifier of another phrase higher. Thus we require the presence of a DP layer above the base  $\nu$ P structure as in (44). I further propose that the Genitive marker in the form of the MTS occupies D. The structure illustrates that the possessor NP and the possessum NP are located below D.

- (44) *Nominal genitive structure*



The idea of having an additional layer above the base structure is consistent with what is observed in other languages. For example, in Hungarian, (Szabolsci 1983, 1994, Kayne 1994: 85-86, Delsing 1998) an additional functional head between D and N is suggested. Thus the Possessor morpheme is located below D in the extended projection. In that proposal there is a structural subject position below D in Spec PossP, as in (45a). This makes D parallel to C rather than I. This structure accounts for the example in (45b): the determiner *az* sits in D, the possesum pronoun *én* sits in Poss and the possesum is contained within the NP.

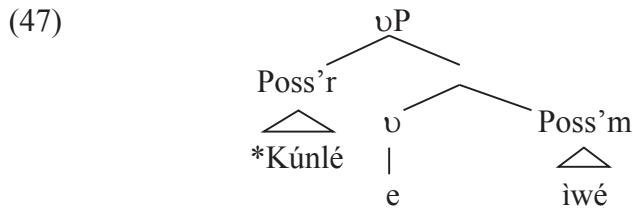


- b.      az      én      vendég-e-m  
          the    I      guest-POSS-1SG  
          ‘my guest’ (Delsing 1998: 93)

The structure in (44) predicts two possible outputs: it allows either the possessor or the possesum to raise to Spec, DP. However in Yorùbá, with nominal possessives, only one of the two possibilities is attested. Precisely, only the possesum raises to Spec DP, thus giving the possesum-possessor linear order in the surface syntax. (46b) where the Possessor precedes the Possesum is ungrammatical.

- (46) a.      ilé      e      Kùnlé  
          house MTS K.  
          ‘Kunle’s house’
- b.      \*Kùnlé      e      ilé  
          K.           MTS house

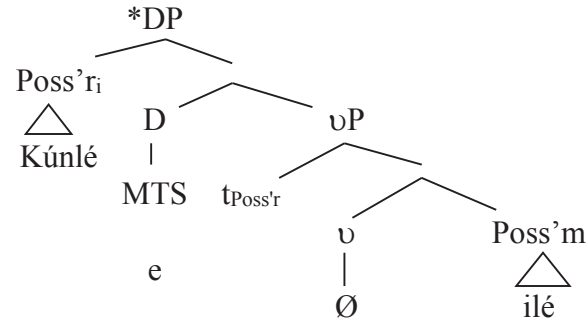
The ill-formed surface string will be compatible with two analyses. The MTS is not in  $v$  because then we get the wrong word order. I illustrate this in (47).



Another way of deriving the ill-formed (46b) would be to raise the possessor to Spec DP, as in (48b). But such possessor raising is not possible in nominal context in Yorùbá. The question is: why? I return to this question in Chapter 3.

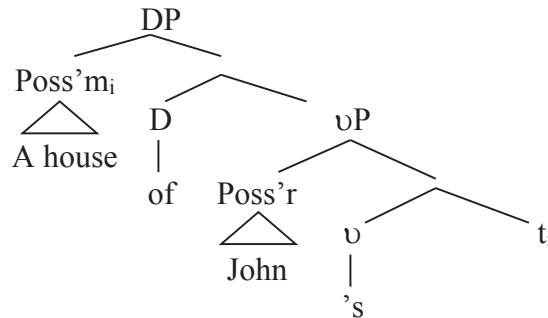
(48) a. \*Kúnlé e ilé

b. \*Nominal Possessor Raising



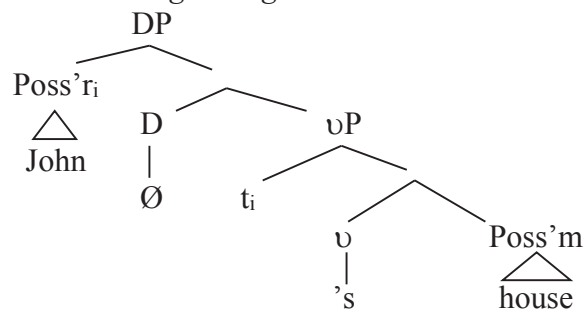
For a language like English, observe that it is possible for either the possessum (49a) or the possessor (49b) to raise to Spec DP.<sup>14</sup>

(49) a. Possessum raising in English



<sup>14</sup> Indeed, the possessor need not raise. The proposed structure also predicts that we should be able to have *John of 's house*, since both D and v are pronounced in English.



b. *Possessor raising in English*

The implication of this analysis is that the Relational  $\upsilon$  position is pronounced in English as 's while the D position is realized as *of*. Thus, these two functional elements can co-occur in English. In Yorùbá only the D position is pronounced (as the MTS).

On the question of why 'of' is analyzed as D in English, this follows from the assumed structure. If there are only two functional positions that must be filled and it is the case that 'of' precedes the Saxon 's in the surface syntax, the only position that 'of' can occupy is D. See Kayne (1994) who proposes that the relevant head can be  $D^0$  or  $P^{015}$ .<sup>16</sup>

The table in (50) summarizes the discussion on the functional elements within the genitive DP in English and Yorùbá.  $\upsilon$  and D are both pronounced in English, whereas in Yorùbá only D is pronounced.

(50) *2 Internal structure of Genitive construction*

|         | $\upsilon$ | D   |
|---------|------------|-----|
| Yorùbá  | Ø          | MTS |
| English | 's         | of  |

<sup>15</sup> This proposal contrasts with Alexiadou and Wilder's (1998). In their proposal, the Possessor Phrase is base-generated. Assuming their proposal, the possessor will remain in Spec, $\upsilon$ P. While that will account for English examples such as 'John's house', such approach yields a wrong output at least for the Yorùbá data where the Possessum NP always precedes the Possessor NP.

<sup>16</sup> Another question that arises is this: why can only the possessum move out of  $\upsilon$ P in Yorùbá and why is it possible to move both the possessor and the possessum out of  $\upsilon$ P in a language like English? A comparison of *a house of John's* where the possessum moves with *John's house* shows that the former has a kind of "mild" topic reading (Mühlbauer, personal communication). The Yorùbá counterpart *ilé e ti Tùndé* has the same reading. This claim is left to further research.

### 2.3.3 What moves: N or NP?

Although the structure proposed predicts phrasal movement, so far, we have only seen the movement of simple phrases that contain only the possessum noun. There is nothing that shows that what actually moves is the possessum noun rather than the whole phrase. In the next three subsections, I present three pieces of evidence that show that what moves is NP (rather than N).

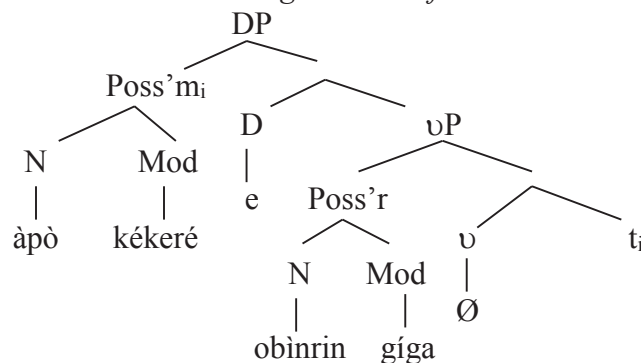
#### 2.3.3.1 Evidence from modifier placement

The first piece of evidence comes from NPs that contain a noun and a modifier. The following examples show that whenever an NP raises, the modifier may raise with it. In (51a), the modifier *kékeré* ‘small’ modifies the possessum noun *àpò* ‘bag’. In (51b), the modifier *gíga* ‘tall’ modifies the possessor noun *obìnrin* ‘woman’. Finally, in (51c), while the possessum noun *àpò* ‘bag’ is modified by *kékeré* ‘small’, the possessor noun *obìnrin* ‘woman’ is modified by *gíga* ‘tall’.

- (51) a. [Àpò kékeré e obìnrin] wù mí  
           bag small MTS woman please me  
           ‘I admire the woman’s small bag.’
- b. [Àpò o obìnrin gíga] wù mí  
      bag MTS womantall please me  
      ‘I admire the tall woman’s bag.’
- c. [Àpò kékeré e obìnrin gíga] wù mí  
      bag small MTS womantall please me  
      ‘I admire the tall woman’s small bag.’

I use (51c) as an illustration. Whenever the possessum NP raises, the modifier may raise with it. The possessum NP consists of the noun *àpò* ‘bag’ and the modifier *kékeré* ‘small’, both of which move to Spec DP.

- (52) a. *Possessum raising with modifier*



In this account, modifiers are treated as adjuncts.<sup>17</sup> What this shows is that whenever an entity is adjoined to a phrase, and there is movement of that phrase, the adjunct can move with the phrase.

### 2.3.3.2 Evidence from structural ambiguity

So far, we have seen cases of modifiers moving along with the nouns that they modify. There is, however, a situation that is yet to be reported, namely cases of structural ambiguity. When there is only one modifier within a genitive construction in certain contexts, the modifier can modify either the Possessor or the Possessum. For example, in (53) *kékeré* ‘small’ may modify the Possessor *Dúpé*, (53a) or the Possessum *àpò* ‘bag’ (53b).

- (53) [Àpò o Dúpé **kékeré**] wù mí  
 bag MTS D. small please 1sg  
 (a) ‘I admire the junior Dupe’s bag.’  
 (b) ‘I admire Dupe’s small bag.’

The claim I make is that it is possible to leave behind an adjoined modifier when the NP that it is adjoined to moves. Thus, the surface string in (53) arises in one of two ways. First the Possessum can be posited to occur by itself with the modifier attached to the Possessor, as in (54).

- (54) a. [NP<sub>POSS’M</sub> àpò]<sub>i</sub> o [NP<sub>POSS’R</sub> Dúpé kékeré] [t<sub>i</sub>]  
           bag Poss’r small
- b.
- 
- ```

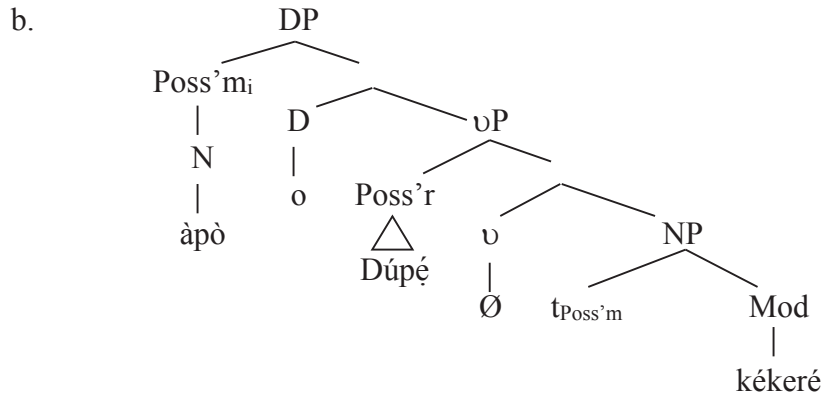
graph TD
    DP --> Poss_mi[Poss'mi]
    DP --> vP
    Poss_mi --> apò["△  
àpò"]
    vP --> D
    D --> o["o"]
    vP --> VP
    VP --> Poss_r[Poss'r]
    VP --> v
    Poss_r --> N
    N --> Dúpe["Dúpé"]
    Poss_r --> Mod
    Mod --> kékeré["kékeré"]
    v --> empty["Ø"]
    v --> trace["tPoss'm"]
  
```

Second, the modifier can attach to the Possessum, but not raise along with it, as in (55). Even though the modifier is adjacent to the possessor in the surface syntax, it

¹⁷ See Chapter 6.

is construed as a Possessum modifier.

- (55) a. [àpò]_{Poss'm} o [Dúpé] [NP t_{Poss'm} kékeré]]
 bag MTS D. small
 'Dupe's small bag'



Based on these data, one can conclude that Yorùbá permits modifier stranding. And when this happens, the stranded modifier still modifies the moved Possessum argument.¹⁸

2.3.3.3 Evidence from selectional restrictions

I showed in the preceding section that a modifier occurring next to a possessor NP could modify the possessor or the possessum. However, there are certain modifiers occurring in the same position, which could only be construed as modifying only the possessum. For instance the modifier *ńlá* 'big' in (56a), and *pẹlẹbẹ* 'flat' in (56b), can only modify the Possessum rather than the Possessor.

- (56) a. [àpótí i Dúpé ńlá] wà níbí
 box MTS D. big be here
 (i) 'Dupe's big box(es) is here.'
 (ii) '*Big Dupe's box is here'

¹⁸ An alternative approach is to adjoin the modifier outside the small clause as in (i).

(i) [kékeré [vP [_{Poss'r} Dúpé v [_{Poss'm} àpò]]]]

In this account there is going to be a successive raising of *àpò* around *Dúpé* (attracted to the Spec of *o*) and raising (with pied piping) of [àpò o Dúpé] around kékeré, (ii)-(iii).

(ii) [kékeré [DP_{Poss'm} àpò o [vP [_{Poss'r} Dúpé v [t_i]]]]]

(iii) [XP [DP_{Poss'm} àpò o [vP [_{Poss'r} Dúpé v [t_i kékeré [t_i]]]]]

For details on pied piping of adjectives, see Cinque (2005a&b).

- b. Àpò o Dúpẹ̀ pẹ̀lẹ̀bẹ̀ sọ̀nù
 box MTS D. flat loss
 (i) ‘Dupe’s flat bag is missing.’
 (ii) ‘*Flat Dupe’s bag is missing.’

The fact that the modifiers *ńlá* ‘big’ and *pẹ̀lẹ̀bẹ̀* ‘flat’ cannot modify the possessor is accounted for via selectional restrictions. These modifiers can only modify [-human] rather than [+human] nouns.¹⁹ Thus, the examples in (57) are illformed

- (57) a. *Dúpẹ̀ ńlá
 D. big
 b. *Dúpẹ̀ pẹ̀lẹ̀bẹ̀
 D. flat

This contrasts with modifiers such as *kékeré*, which means both ‘small’ and ‘junior’, or *gíga* ‘tall’, which can modify both human and non-human nouns.

- (58) a. [àpótí i Dúpẹ̀ kékeré]
 box MTS D. small
 (i) ‘Dupe’s small box(es)’
 (ii) ‘Dupe (junior)’s box’
 b. [àpótí i Dúpẹ̀ gíga]
 box MTS D. tall
 (i) ‘Dupe’s tall box(es)’
 (ii) ‘tall Dupe’s box’ (the box of Dupe who is tall)

In this latter case, the modifier can modify either the possessum or the possessor.

¹⁹ There is an exception to this rule. Consider (i) where there are two possible interpretations. In (b), the use of *omọ ńlá* is idiomatic meaning ‘a terrible child’ rather than ‘a big boy’.

- (i) [àpótí i omọ ńlá]
 box MTS child large
 (a) ‘the child’s big box’
 (b) ‘the terrible child’s box’

The apparent exception to the rule could be due to the fact that in (ib) *ńlá* is actually a pejorative use of the adjective (similar to the pejorative suffixes of other languages), in which case one could expect the co-occurrence of *ńlá* with ‘small’ (box of the child terrible small, or box of the small terrible child, meaning the terrible small child’s box).

2.3.4 Genitive pronouns

Looking back at all of the data so far presented, discussed, and analyzed, the possessor has always been a personal name. Yet given the right context, pronouns can replace nouns as possessors. In (59b), the clitic pronoun possessor takes the position of the personal name *Kúnlé*.

- (59) a. ilé e Kúnlé
 house MTS K.
 ‘Kúnlé’s house’
- b. ilé e rí
 house MTS 3sg-Gen
 ‘his/her house’

There are two facts that I bring to the attention of readers on pronouns: they divide into three classes weak (clitic), strong and reflexive pronouns,²⁰ (cf. Cardinaletti 1998 on Italian and Spanish, and Schoorlemmer 1998 on Dutch), and they can feature in genitive constructions.

As background information, I provide a data set to show the pronoun paradigm when they enter into genitive constructions.²¹

- (60) Weak Pofétí fẹ [ìwé è mi]
 T. want book MTS 1sg
 ‘Titi wants my book.’
- b Títí fẹ [ìwé è rẹ]
 T. want book MTS 2sg
 ‘Titi wants your book.’
- c Títí fẹ [ìwé e rẹ]
 T. want book MTS 3sg
 ‘Titi wants her book.’
- d Títí fẹ [ìwé e wa]
 T. want book MTS 1pl
 ‘Titi wants our book.’

²⁰ The terms *weak* and *strong* as used in the Yorùbá literature is based on certain common properties that members of each group share which others do not share. Two of such properties is that the strong pronoun behaves like proper noun in the sense that it can be modified and it can be focused whereas the weak pronoun can neither be modified nor focused. For details, see Bámgbósé (1967, 1990) Awóbùlúyì (1978) Pulleyblank (1986), Déchaine (1993) among others.

²¹ The tonal alternation on the mid tone genitive marker in (60) is not discussed in this book due to space. Readers are referred to Akinlabí and Liberman (2000).

- e. Títí fẹ́ [ìwé e yín]
 T. want book MTS 2pl
 ‘Titi wants your book.’
- f. Títí fẹ́ [ìwé e wọ̀n]
 T. want book MTS 3pl
 ‘Titi wants their book.’

Observe that in Yorùbá, as in many other languages, whenever a pronoun functions as a possessor, it takes a different form from when it functions as subject or object NP. To illustrate this consider the 3sg clitic pronoun. In the subject position (61a), it is /ó/, in the object position (61b), it is /i/.²² But when it functions as a possessor (61c) it takes the form /rẹ́/.

- (61) a. [Ó] rí mi
 3sg.NOM see 1sg.Acc
 ‘S/he saw me.’
- b. Mo rí [i]
 1sg.NOM see **3sg.ACC**
 ‘I saw him/her.’
- c. Mo rí [ìwé e [rẹ́]
 1sg. NOM see book MTS **3sg.Gen**
 ‘I saw his/her book.’

Comparing the personal name-as-possessor with pronoun-as-possessor raises one crucial question. Is the form a pronoun takes due to Case assignment? My answer is in the affirmative. Observe that like most languages²³, Yorùbá pronouns have different forms depending on their syntactic position and function. I therefore propose that when a pronoun functions as a possessor, it must take the genitive form. This is why only (62a), and neither (62b) nor (62c), is well formed.

²² Note that in Yorùbá, the object pronouns take different forms depending on their syntactic position. For example, the 3sg clitic is invariantly “ó” when in subject position whereas its shape in the object position is determined by the shape of the final vowel of the verb.

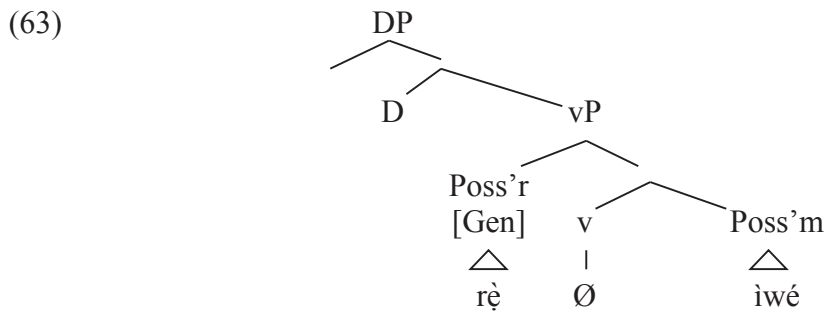
- (i) a. Adé gb[é e]
 Ade carried it
- b. Adé t[à á]
 Ade sold it

²³Take for example the English 3sg masculine pronoun. When in the subject position, it takes the form *he* which is synonymous with NOM Case. When in object position, the same pronoun is realized as *him*. This is also synonymous with ACC Case. Finally, when the same pronoun functions as a genitive pronoun it is realized as *his*. This again is synonymous to Gen.

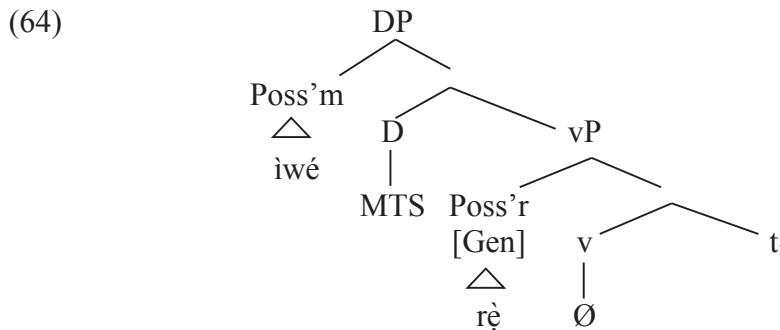
- (62)
- | | | | |
|----|----------------|-----|----------|
| a. | iwé | e | rè |
| | book | MTS | 3sg.Gen |
| | 'his/her book' | | |
| b. | *iwé | e | ó |
| | book | MTS | 3sg. NOM |
| c. | *iwé | e | e |
| | book | MTS | 3sg.ACC |

Just as possessors appear in the genitive Case, so too do subjects and objects take specific Case forms. Take for instance, the difference in form between the 3sg in subject and object position in (61). In the subject position where it receives NOM Case, its form is *ó* (61a), whereas when it is in the object position where it receives ACC Case, the form it takes is *i*, (61b).

The base structure in (63) illustrates the account of possessive pronoun, which is not different from the one I already showed for possessors that are personal names.



Again, the possessum NP moves to Spec DP as shown in (64).²⁴



²⁴For details on Yorùbá pronouns, see Adésolá (2001); Ajíbóyè (2005a); Akinlabí and Liberman (2001); Awóbùlúyì (1978, 1995); Bámgbósé (1966, 1967, 1990); Déchaine (1993); Déchaine and Wiltschko (2002a,b); Manfredi (1987, 1995) and Pulleyblank (1983).

I now turn to the phonological account of the genitive marker in Yorùbá genitive construction, namely the mid tone syllable.

2.4 The Yorùbá nominal genitive: Syntax-phonology interaction

The discussion has so far concentrated on the semantic and syntactic basis of the Yorùbá genitive construction. In this section, I turn to the question of what conditions the phonological shape of the genitive construction, focusing on the status of the MTS that appears between the possessum and the possessor which for now is represented as a mora μ .

- (65) a. Poss'm Poss'r
 V1] μ [V2
 ilé e Òjó
 house MTS O.
 'Ojo's house'

After considering how the syntactic structure of genitive constructions maps onto phonological forms cross-linguistically (§2.4.1), I review the phonological distribution of the MTS (§2.4.2). Following my analysis of the MTS as a functional element, and the claim that it occupies a D position, I argue that its presence is regulated by syntax but its overt realization is phonologically determined. This means though it is found in the environment of a nominal phrase its pronunciation is determined by certain phonological rules. It also implies that while syntax determines where we get the MTS, phonology determines when and how it is to be pronounced.²⁵ I consider two different accounts of the MTS. One analysis claims that the morphosyntax inserts a genitive formative in the appropriate place. This is the analysis that I pursue here (§2.4.3). Another analysis treats the MTS as part of the word/lexical item (§2.4.4). In that account, the MTS is analyzed as a prosthetic vowel that is used to restructure non-canonical nouns in Yorùbá (Awóbùlúyì 2004). I argue that data from Standard Yorùbá (SY) and Mòbà (one of its dialects) are consistent with the first analysis though there is some variation. The second analysis is rejected as it accounts for neither the SY data nor the Mòbà data²⁶. This section

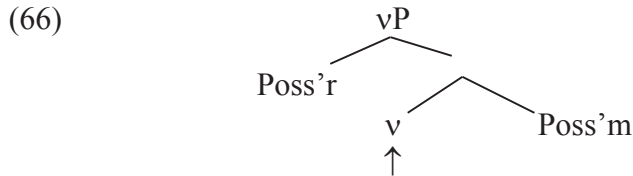
²⁵ This is in line with the view that phonological content implies the presence of a Functional head, but the absence of such content does not imply the absence of a Functional head (Déchaine 1993: 84).

²⁶ Another alternative analysis, which I do not consider in this book, treats it as a syntactically conditioned copy that marks the R relation between the possessor and the entity that is possessed. This view has been implicitly expressed in Bámgbóšé (1990), Akinlabí and Liberman (2000) and explicitly in the work of Déchaine (2001) and Ajíbóyè (2004b). For details on copying analysis, see also Postma (1995), Mortenson 2003 Déchaine & Ajíbóyè (2004).

closes with a discussion of the relationship between MTS and L-deletion (§2.4.5).

2.4.1 Spelling out the genitive: cross-linguistic evidence

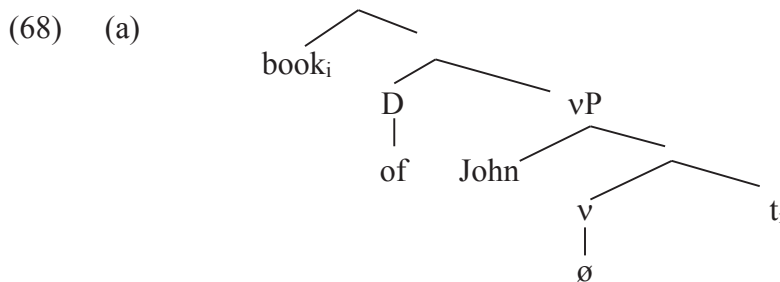
Most languages have morphemes that are used to indicate the genitive relation between two arguments, although the phonological representation of these morphemes may vary. Observe that in the genitive base structure (66), there is only one position available for this morpheme in the base structure namely, the *v*.

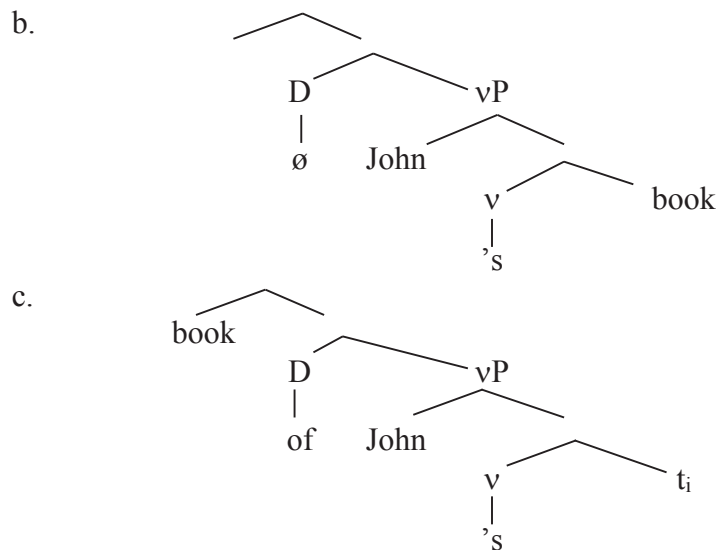


However it may be pronounced as *D* in the surface syntax. In particular, English pronounces both *D* (of) and *v* ('s), (67). The Saxon morpheme has three allomorphic variants (Chomsky and Halle 1968, Russell 1997, Sótílóyè 1999): [z], [s] and [əz]. After a voiceless consonant, it is realized as [s]. After a voiced consonant, it is [z]. After a fricative or an affricate, it is [əz].

- (67)
- | | | |
|----|---------------------------------------|-----------------|
| a. | book of John | <i>N of N</i> |
| b. | (i) /dʒan + z bʊk/ 'John's book' | <i>N 's N</i> |
| | (ii) /pɒp + s bʊk/ 'Pope's book' | |
| | (iii) /dʒʌdʒ + əz bʊk/ 'Judge's book' | |
| c. | book of John's | <i>N of N's</i> |

The relevant structures are given in (68).

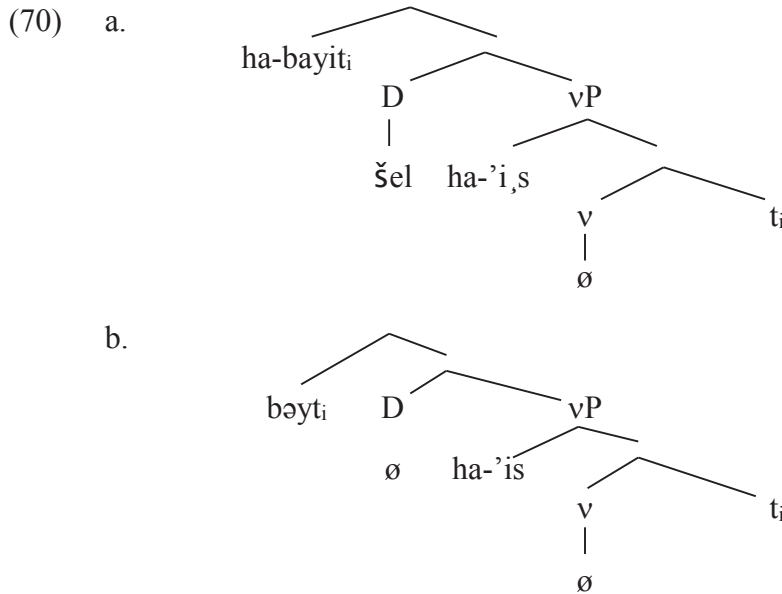




In Hebrew, there is a distinction between the ‘free state’ and the ‘construct state’ genitive.

- (69) a. ha-bayit šel ha-’i,s *free state*
 the-house of the-man
 ‘the man’s house’
- b. bəyt ha-’i,s *construct state*
 house the-man
 ‘the man’s house’ (Siloni 1997: 21)

Phonologically, Hebrew marks its construct genitive on the head noun. When the head noun is stressed, it bears a full vowel. But when there is a shift of stress from the head noun to the genitive noun phrase, other phonological processes such as vowel reduction usually follow (Siloni 1997). Thus comparing (69a) and (69b), one can see that the head noun *bayit* ‘house’ in (68a) takes the full vowel because it is stressed in free state genitives. On the other hand, when the stress is lost on the possessum (69b), the vowel of the head noun reduces to a schwa. Siloni (1997) concludes that the shift in stress on the possessum is an indication that an abstract genitive Case is assigned by the head noun in construct state NPs. In my own account it appears that only the D position is pronounced in Hebrew. The relevant structures are given in (70).

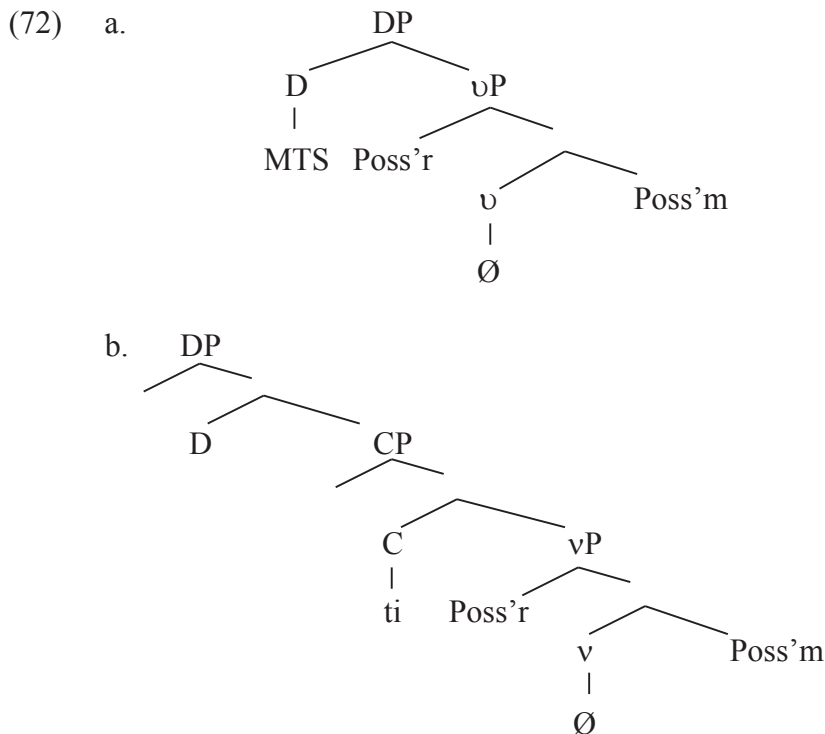


In (70a), the possessum (*ha-bayit* ‘the house’) raises to Spec DP, and D is occupied by *šel* ‘of’. In (70b), the possessum (*bəyt* ‘house’) again raises to Spec DP; this time, however, D has no phonological content. This empty D correlates with de-stressing of the possessum noun in the so-called construct states.

Turning now to Yorùbá, we observe that there are two grammatical elements that mark the genitive. There is MTS (71a), and *ti* ‘of’ (71b). Each of these occurs between the possessum and the possessor.

- (71) a. epo o Dòtun
 oil MTS D.
 ‘Dotun’s oil’
- b. epo ti Dòtun
 oil of D.
 ‘oil of Dotun’

Though I treat both examples as genitive DPs, I propose different structures for each of them. I analyze the MTS as D, which takes a small clause as its complement, as in (72a). I analyze the *ti* element as C, which takes a small clause as its complement, as in (72b).



We have already seen the motivation for (72a). Readers are referred to Chapter 3 for the motivation and discussion of the structure in (72b).

2.4.2 The phonological distribution of the Mid Tone Syllable

I propose that though the MTS has a syntactic function, its spell-out is phonologically conditioned. This is consistent with the claim that the MTS is a functional head that is overtly represented unless a phonological rule prevents it. The phonological rule that determines when the MTS is to be pronounced is the focus of this section.

The examples in (73) show that the MTS is obligatory before consonant-initial nouns. Moreover, observe that the vocalic content of the MTS is always identical to the vowel that precedes it. In particular, the examples given in (73) show that V1 can instantiate all of the possible oral vowels in Yorùbá: {i, u, e, o, ɛ, ɔ, a}.²⁷

²⁷ This is also true of the nasal vowels: {in, un, ɔn, an} as the examples in (i) illustrate.

- (i) a. orín in Túndé
 chewing stick MTS T.
 ‘Tunde’s tooth brush’
- b. ogún un Túndé
 inheritance MTS T.

(73) *Obligatory presence of MTS*

- | | | | | | |
|----|-------------------|---|-------|---------|------------|
| a. | orí | i | Kúnlé | H] M [H | *orí Kúnlé |
| | 'Kúnlé's head' | | | | |
| b. | ojú | u | Kúnlé | H] M [H | *ojú Kúnlé |
| | 'Kúnlé's eye(s)' | | | | |
| c. | ètè | e | Kúnlé | L] M [H | *ètè Kúnlé |
| | 'Kúnlé's lips' | | | | |
| d. | owó | o | Kúnlé | H] M [H | *owó Kúnlé |
| | 'Kúnlé's money' | | | | |
| e. | iṣẹ | ẹ | Kúnlé | H] M [H | *iṣẹ Kúnlé |
| | 'Kúnlé's work' | | | | |
| f. | ọkọ | ọ | Kúnlé | L] M [H | *ọkọ Kúnlé |
| | 'Kúnlé's vehicle' | | | | |
| g. | ajá | a | Kúnlé | H] M [H | *ajá Kúnlé |
| | 'Kúnlé's dog(s)' | | | | |

Before vowel-initial nouns, MTS is optional, as in (74). Again, observe that when the MTS is present its vocalic content is identical to the vowel that precedes it.²⁸

(74) *Optional presence of MTS*

- | | | | | |
|----|--------------|-----|-----|---------|
| a. | orí | (i) | Adé | H] M [M |
| | 'Ade's head' | | | |

-
- | | | | |
|----|-----------------------|-----|-------|
| | 'Tunde's inheritance' | | |
| c. | ọpón | on | Túndé |
| | tray | MTS | T. |
| | 'Tunde's tray' | | |
| d. | àdán | an | Túndé |
| | bat | MTS | T. |
| | 'Tunde's bat' | | |

²⁸ Some Yorùbá linguists (e.g. Awóbùlúyì 2004) report that the MTS is never present in vowel-initial nouns. There are two reasons for this opposing view. One is dialectal variation. As pointed out in Awóbùlúyì (2004), there are some dialects of Yorùbá where this segment is not pronounced before vowel-initial words. However, the fact that this segment is pronounced in Standard Yorùbá calls for further research into other dialects. If it turns out that there are more dialects that support its absence, then we can conclude that it is an innovation in Standard Yorùbá. The other reason is some phonological rule, which might rule out the sequence of three vowels in an NP. Awóbùlúyì however admits that this mora can be realized when one hesitates. This is why he concludes that the presence of this mora neither has any syntactic nor semantic function. The data reported here reflect what has been established in the literature (Bámgbósé 1990; Akinlabí and Liberman 2000) as well as the writer's judgment, namely that at normal speech rate, the MTS is usually absent before V-initial nouns, but at slower rates, the MTS is present.

b.	ojú	(u)	ẹ̀bùn	H] M [L
	'Ebun's eye(s)'			
c.	ètè	(e)	Olú	L] M [M
	'Olu's lips'			
d.	owó	(o)	Òjó	H] M [L
	'Ojo's money'			
e.	ọ̀wọ́	(ọ)	Eléyìnmi	H] M [M
	'Eleyinmi's hand'			
f.	ẹ̀sẹ̀	(ẹ)	ògá	L] M [L
	'master's foot'			
g.	apá	(a)	Ìsíkálù	H] M [L
	'Isikalu's arm(s)'			

In what follows, I account for how the MTS comes to be realized. I consider two analyses: one claims MTS is an underlying mora μ (§2.4.3); the other claims MTS is a phonologically conditioned segment (§2.4.4).

2.4.3 Analysis I: the Mid Tone Syllable is an underlying mora μ

The genitive marker always takes the exact shape of the final vowel of the possesum, (75a), or that of the modifier if present, (75b).

- (75) a. ilé e Títí
house MTS T.
'Titi's house'
- b. ilé nlá a Títí
house big MTS T.
'Titi's big house'

The question that I address is how the genitive marker comes to assume the segmental shape of the preceding vowel without inheriting its tone. For example, in (75a), [e] is the segmental component of the H tone [é]. This excludes the H-tone. In accounting for this, I compare data from Standard Yorùbá with Mòbà and claim that the difference between the two varieties is due to the way they represent this genitive marker in the phonology. I propose that it is the morphosyntax that inserts a genitive formative in the possesum-possessor boundary. The underlying phonological form of this formative is stated as (76).

- (81) a. $\text{filà } \mu \text{ Kúnlé} > \text{filà } a \text{ Kúnlé}$
 cap K. MTS
 ‘Kúnlé’s cap’

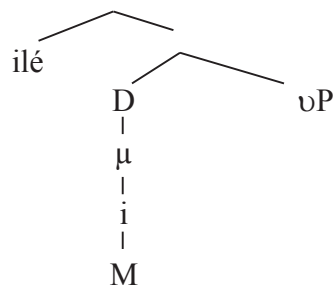
b.	filà	μ	òjó	>	filà	(a)	òjó
	cap		O.			MTS	
	‘Ojo’s cap						

A comparison of Standard Yorùbá with the Mòbà dialect shows that the phonetic representation of the MTS in the two speech forms is not the same. I claim that this is due to the way the rules of phonology apply in the two speech varieties. First, consider the following data.³¹ In Mòbà, before consonant-initial nouns the vocalic content of the MTS is the vowel /i/.

(82)	Mòbà	Standard Yorùbá	Gloss
a.	erí i Kúnlé	orí i Kúnlé	‘Kúnlé’s head’
b.	ojú i Kúnlé	ojú u Kúnlé	‘Kúnlé’s eye(s)’
c.	ètè i Kúnlé	ètè e Kúnlé	‘Kúnlé’s lips’
d.	eó i Kúnlé	owó o Kúnlé	‘Kúnlé’s money’
e.	usẹ i Kúnlé	işẹ ẹ Kúnlé	‘Kúnlé’s work’
f.	ọkọ i Kúnlé	ọkọ ọ Kúnlé	‘Kúnlé’s vehicle’
g.	apá i Kúnlé	apá a Kúnlé	‘Kúnlé’s arm(s)’

I propose that despite the differences in the surface form, the MTS in Mòbà is also underlyingly a mid tone mora just as in SY. When the possessor is consonant initial, I claim that this mora undergoes default feature assignment and surfaces as /i/ (cf. Pulleyblank 1983, 1988 and Akinlabí 1985).

(83) The μ undergoes default feature assignment



³¹ The difference between the two dialects in lexical items such as ‘head’, ‘money’ and ‘work’ is not crucial to the discussion here.

However, when the possessor is vowel initial, the mora is not assigned any default feature, so it has to delete with its M tone since it is unpronounced in the surface syntax.

- (84) a. filà μ Kúnlé > filà i Kúnlé
 cap ø K.
 ‘Kúnlé’s cap’
- b. filà μ òjó > filà òjó
 cap ø O.
 ‘Ojo’s cap’

This is why we do not have examples such as (85) in Mòbà.

- (85) a. *filà i ògá
 cap MTS master
- b. *owó i òjó
 money MTS O.

There is one vital point to note with respect to the MTS in Mòbà and Standard Yorùbá. The point is that while the MTS is optionally pronounced in Standard Yorùbá when the possessor is vowel initial, in Mòbà, it must not be pronounced.

To recap, I have presented the facts of both the Standard Yorùbá and Mòbà data. The morphosyntax makes the genitive formative available in the appropriate place (i.e. in the Possessum-Possessor domain). The underlying phonological form of this formative is a mora μ without vocalic specifications. I have also shown that it is the rules of the phonology that cause the different surface forms in Standard Yorùbá and Mòbà. In Standard Yorùbá, the rules of assimilation and deletion apply in appropriate cases, i.e. obligatory regressive assimilation whenever the possessor is Consonant-initial and optional deletion whenever the possessor is Vowel-initial. In Mòbà the rules of default feature assignment and deletion apply in appropriate contexts, i.e. default feature assignment whenever the possessor is Consonant-initial and obligatory deletion whenever the possessor is Vowel-initial. This account derives all the observed facts in a simple fashion.³²

³² While evidence that comes from different dialects is desirable and should be pursued in helping us to know more about what operates in SY (Bámgbósé 1986; Awóbùlúyì 1988), such evidence (especially from a few dialects) is not absolute. There is a need for study of other dialects to see whether the story is the same. Observe that there are cases where the standard form of a language does something that is completely

2.4.4 Analysis II: The Mid Tone Syllable as phonologically conditioned segment

This section examines an alternative proposal by Awóbùlúyì (2004). There are three points that are relevant here. First, Awóbùlúyì challenges the claim that the MTS is a genitive marker, §2.4.4.1. Second, he claims that the MTS is a prosthetic vowel, §2.4.4.2. Third, he treats the MTS as a hesitation marker, §2.4.4.3. I examine each point briefly.

2.4.4.1 The Mid Tone Syllable is not a genitive morpheme

In reaction to Ajíbóyè (2004b), which is the same view that I pursue further here, Awóbùlúyì (2004) claims that there is no genitive morpheme that exists between the Possessor and the Possessum in Yorùbá. According to him, the MTS that shows up in genitive constructions has neither syntactic nor semantic content. On this view, he contends that the:

... possession is expressed in Standard Yorùbá with noun phrases formed by simply juxtaposing either two noun phrases or a noun phrase and an appropriate possessive pronoun in that order. (Awóbùlúyì 2004:1)

Consider the examples in (86) taken from the cited work.

- (86) a. Owó Òjó
money (of) Ojo
'Ojo's money'
b. Owó rẹ̀
money his/her/its
'his/her/ money; money for it' (Awóbùlúyì 2004:2)

Under Awóbùlúyì's account, the examples in (86) will have the structure in (87) as the genitive phrase.³³

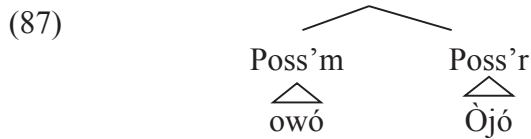
different from what its dialects do. One case in point is the occurrence of /u/ and nasal vowels word initial of certain nouns in some dialects; in particular Mòbà but not in Standard Yorùbá (Ajíbóyè 1991).

³³ The example in (86b) is not attested in Standard Yorùbá as the correct form obligatorily takes the MTS.

- (i) owó o rí
money MTS 3sg
'his/her money'

The form reported in (86b) is only allowed in the orthography by convention. Nevertheless, in some dialects of Yorùbá especially in Mòbà, there is also a parallel form to (i), which shows the absence of the MTS, (ii).

- (ii) eó ø rìn (Mòbà dialect)
money 3sg



According to that analysis there is nothing like a genitive marker in Yorùbá.

The first thing one observes about the examples in (86) and the representation in (87) is that they do not show any relation between the possessor and the possessum. I have demonstrated that there exists a relation between the possessor and the possessum in Yorùbá as in many other languages. I have also argued that the appearance of the MTS between these two arguments is symptomatic of this relation. The claim is that when it is covert, this is due to phonological rules that prevent the MTS from being pronounced. Thus, the absence of phonological content is still interpreted as being associated with relational meaning. In other words, the phonologically empty category is licensed syntactically.

More revealing are the numerous examples that have been previously cited which show contexts where the presence of the MTS is obligatory. As a reminder, I give one such example below.

- (88) a. ilé e Kúnlé
 house MTS K.
 'Kunlé's house'
- b *ilé Kúnlé
 house K.

The ill-formedness of (88b) is due to the absence of the MTS. Awóbùlúyì's proposal represents the possessor and the possessum as sisters. On the justification for why the genitive construction in Yorùbá does not have a genitive marker, he has this to say:

... whether a given NP1 NP2 construction signifies possession or mere apposition in the language is actually a function either of the context or of the meanings or semantic classes of the individual lexical items involved (Awóbùlúyì 2004:6).

Recall from above that the R relation may be contextually or lexically determined. In this respect the present analysis accords with Awóbùlúyì's general claim. However, while Awóbùlúyì treats the Possessum-Possessor relation as a special case of apposition, the present analysis distinguishes the two as discussed above.

2.4.4.2 The Mid Tone Syllable as a prosthetic vowel

Awóbùlúyì argues that appearance of the MTS in genitive constructions is a purely phonological phenomenon. Taking evidence from many dialects of Yorùbá such as Mòbà, Èkìtì, Ìkàré and Òwò, he asserts that the MTS is a prosthetic vowel that is used to restructure non-canonical nouns in Yorùbá.³⁴ Canonical nouns are defined as follows: (i) they are non-derived; (ii) they are not borrowed; and (iii) they have V-CV structure. Some representative examples are given in (89).

- (89)
- | | | | |
|----|--------------|----|-------------|
| a. | iké | b. | omi |
| | ‘hunch back’ | | ‘water’ |
| c. | epo | d. | ẹ̀fọ̀ |
| | ‘oil’ | | ‘vegetable’ |
| e. | ọjà | | |
| | ‘market’ | | |

Now consider the examples in (90), which are either borrowed as in the case of (a-c), or derived through a deletion process as in (d-e).

- (90)
- | | | | |
|----|--------------------|-----------------|-------------|
| | Mòbà ³⁵ | Standard Yorùbá | Gloss |
| a. | i-gómìnà | gómìnà | ‘governor’ |
| b. | i-télò | télò | ‘tailor’ |
| c. | i-bíríkì | bíríkì | ‘brick’ |
| d. | i-délé | Délé | Yorùbá name |
| e. | i-kúnlé | Kúnlé | Yorùbá name |
- (Awóbùlúyì 2004: 9-10)

For examples such as those in (90), Awóbùlúyì’s proposal will yield the structure in (91), where the so-called prosthetic vowel is part of the NP.

- (91)
-
- ```

graph TD
 DP --> D
 DP --> NP
 NP --> i_gominà["i-gómìnà"]

```

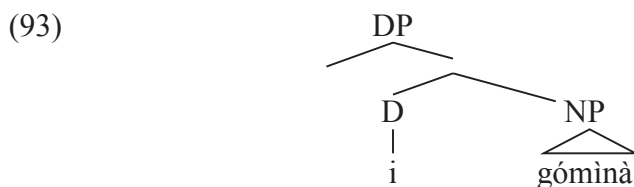
<sup>34</sup> In earlier work (Ajíbóyè 1991), it has been established that most nouns that begin with a consonant in Standard Yorùbá are pronounced with vowel /i/ preceding such consonants in Mòbà. In fact, in the cited work, I mentioned that cases where there is deletion of a syllable or two in personal names before the output produce C-initial nouns, such nouns must obey the epenthetic rule that enforces /i/ to be inserted. Thus, *idélé* could be a reduced form of Awódélé, Ògúndélé, Olúdéle etc. Readers are referred to that work for more data and full explanation.

<sup>40</sup> In the original work, Awóbùlúyì simply puts ‘Dialects’ in the place where I put Mòbà. I make this change to be more precise. Mòbà is one of the dialects that has the so-called prosthetic vowel.

According to Awóbùlúyì, whenever consonant initial nouns enter into a genitive construction, it is the same prosthetic vowel that shows up. Some illustrative examples are given in (92).

- (92) Mòbà.
- a. ulé i- gómìnà  
house governor  
'Governor's house'
  - b. asọ i-télò  
cloth tailor  
'the tailor's dress'
  - c. eó i-bírikilà  
money bricklayer  
'bricklayer's money'
  - d. ata i-délé  
pepper D.  
'Dele's pepper'
  - e. òwú i-kúnlé  
cotton K.  
'Kunle's cotton'

In Ajíbóyè (2004a, b) and also in this present work, I treat the so-called prosthetic vowel as a functional element that occupies the D position, as in (93).



One other argument that Awóbùlúyì puts forward in support of the claim that the MTS is a prosthetic element is with respect to the tonal melody it bears. On why the MTS bears M tone, he asserts that:

MTS cannot but bear mid tone, as it is a mere surface manifestation of a prosthetic vowel *i* with mid tone that is required to restructure otherwise phonologically deviant or noncanonic nouns when used at least NP-internally in all varieties of Yorùbá (p. 17).

As already discussed, Awóbùlúyì's account of MTS is at variance with the one pursued in this work. The first problem is the constraint that restricts the prosthetic segment to NP internal positions. The immediate question that follows is why the NP internal condition? If indeed this is a prosthetic vowel then we should be able to have it in word initial position in Standard Yorùbá. This is not the case as shown by the unattested form in (94b).

- (94) a. Mo rí orí i-gómìnà *Standard Yorùbá*  
 1sg see head MTS-governor  
 'I saw the governor's head.'
- b. \*Igómìnà rí mi.  
 governor see 1sg

Even in Mòbà, which is famous for the use of vowel /i/ in consonant initial nouns, the occurrence of /i/ in sentence initial position is optional.

- (95) a. I-kúnlé rí mi *Mòbà*  
 see 1sg  
 'Ikunle saw me.'
- b. Kúnlé rí mi  
 see 1sg  
 'kunle saw me.'
- (96) a. I-gbéinga yá á *Mòbà*  
 Question-tag come  
 'Did Igbenga come?'
- b. Gbéinga yá á  
 Question-tag come  
 'Did Gbenga come?'

Moreover, the optionality of Mòbà /i/ is completely general. While the examples in (95) and (96) show the optionality of /i/ for nouns in subject position, (97) show that /i/ continues to be optional when the noun is in object position.

- (97) a. Mì ín pe Ikúnlé *Mòbà*  
 1sg HTS call  
 'I called Ikunle.'
- b. Mì ín pe Kúnlé  
 1sg HTS call  
 'I called Kunle.'



However, in genitive constructions mid tone *i* is obligatory before consonant initial nouns in Mòbà.

- (98) a.      Ìwé    i-kúnlé      rẹ      é                      Mòbà  
                  book   MTS-T.      COP   Dem  
                  ‘This is kunle’s book’
- b.      \*Ìwé    Kúnlé              rẹ      é

In conclusion, in Mòbà M-tone *i* is optional with ordinary nouns but it is obligatory in genitive constructions (except if the possessor is V-initial). This syntactic contrast is not captured by Awóbùlúyì’s analysis.

#### 2.4.4.3 The Mid Tone Syllable as a mark of hesitation

The last claim contained in Awóbùlúyì (2004) is that whenever the MTS is found in genitive constructions involving vowel initial possessors, it signals hesitation. As earlier mentioned about the speech of this researcher and as also found in the literature (Bámgbósé 1990, Akinlabí and Liberman 2000), the presence of the MTS in genitive constructions is not a way of expressing hesitation. Akinlabí and Liberman’s observation, which supports my analysis, is contained in the following excerpt:

A Mid tone vowel occurs pervasively (though usually optionally) in the middle of such genitive constructions. It assimilates in quality to the vowel that precedes. This vowel is obligatory only when the possessor (the noun in second position) is consonant-initial. When the second noun is vowel-initial (the normal situation), then the vowel is optional. In the case of a vowel-initial possessor, it is natural to think of this extra vowel as an optional possessive morpheme. In the case of a consonant-initial possessor, we are tempted to think of it as an empty prefix. (Akinlabí and Liberman 2000:17)

As mentioned before however, the presence of the MTS is optional before vowel-initial nouns and this optionality is sensitive to speech rate. Thus, in (99) at fast speech rate the MTS is not pronounced, at slow speech, it is.

- (99) a.      ilé      (e)      òjó  
                  house MTS   O.  
                  ‘Ojo’s house’

- 
- b.      ɔmɔ    (ɔ)      akin  
           child   MTS   A.  
           ‘Akin’s child’
- c.      ɔkɔ    (ɔ)      ɔjó  
           vehicle MTS   O.  
           ‘Ojo’s vehicle’                      (Akinlabí and Liberman 2000: 18)

In conclusion, I have discussed two different analyses of the MTS: (i) as a syntactically conditioned mora  $\mu$ ; (ii) as a phonologically conditioned segment. I have established that the data from both Standard Yorùbá and Mòbà is consistent with analysis (i). In view of the above, I reject analysis (ii) as it lacks descriptive and explanatory adequacy to account for the facts of the two speech forms.

#### 2.4.5 Relating the Mid Tone Syllable to L-deletion

There is yet another indirect piece of evidence that supports the presence of a genitive marker in genitive constructions. This evidence comes from the loss of a low tone on the final segment of the possessum phrase. Although this is a phonological process, it nevertheless has syntactic implications. Bámbósé (1967, 1990) and Déchaine (2001) have discussed the deletion of the final low tone of a possessum noun.

My goal is to find answers to the following questions:

- (i) Is it sufficient that the possessum ends with a segment bearing an L tone or do we need to look beyond the last segment of the possessum for L deletion to apply?
- (ii) Just as the final L tone of the possessum NP can be deleted, is it also possible to delete the final H tone of the possessum NP?
- (iii) Is tone deletion of the possessum NP sensitive to syntactic structure; in particular, does a [Possessum-Possessor] sequence behave the same as a [Possessum-Modifier] sequence?

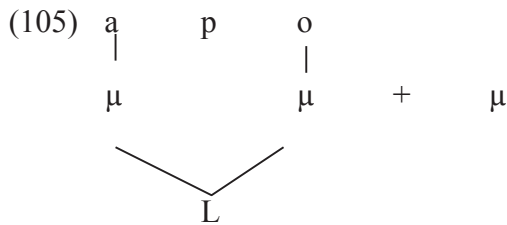
Addressing the above questions not only corroborates previous analyses, it also accomplishes three additional things. First, in the course of attempting to answer these questions, I consider a broader range of data than has been previously examined. Second, I demonstrate that in order for L-deletion to apply, all the segments within the possessum must bear L-tone. Third and most important, the

deletion of L tone and its replacement with M tone is shown to correlate with genitive marking.<sup>36</sup> Consider the following data:

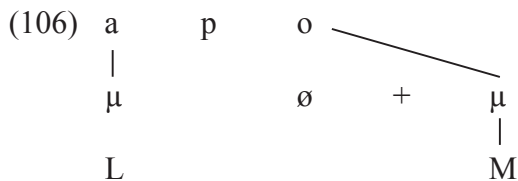
- (100) a. àṣà a Dúdú  
custom MTS African  
'African customs'
- b. àṣà Dúdú  
custom African
- (101) a. èwù u Délé  
dress MTS D.  
'Dele's dress'
- b. èwù Délé  
dress D.
- (102) a. ìrù u kìnìhún  
tail MTS lion  
'lion's tail'
- b. ìru kìnìhún  
tail lion
- (103) a. ìgò o bíà  
bottle MTS beer  
'bottle of beer'
- b. ìgo bíà  
bottle beer
- (104) a. àpò o ti wa  
bag MTS C our  
'our own bag'
- b. àpo ti wa  
bag C our  
'our own bag' (cf. Bámgbósé 1990)

<sup>36</sup> Again, this claim is subject to an instrumental phonetic study examining the timing and duration of the mid-tone bearing genitive mora and the option of contracting it with the final syllable of the head noun. The relevance of such an experiment is to show that the contracted form is significantly shorter than the full form. It will also enable us to map the relative timing of the tonal and segmental events (i.e. whether the L to M transition happens differently if the M is a result of elision), or if it is a 'lexical' M (Ajíbóyè et al 2004).

The examples in (100)-(104) split into two: the presence of the MTS in all the (a) examples and its absence in all the (b) examples. There is one other vital point to make with respect to the (b) examples: the replacement of the L tone on the final syllable of the first noun with M tone. The surface forms in the (b) examples in (100)-(104) are accounted for as follows. As a starting point, since the environment for L deletion is where all the vowels of the possessum bear L tone, I assume that the vowels in this environment are associated with one L underlyingly (cf. Leben 1973 among others).



When the L tone of the final vowel in the possessum NP deletes, we are left with two morae that have no segmental features. The mora of the final vowel of the possessum also deletes and the vowel is associated with the mora of the genitive marker. Finally this vowel is assigned the M tone.



My goal here is to account for why there is L-tone deletion of the final vowel of the possessum. I also account for why the L-tone that is deleted is being replaced with M-tone. Lastly, I show the reason for the absence of M-tone genitive marker when the final L-tone of the possessum NP deletes.

Déchaine's (2001) observation is that the genitive L-deletion is optional before a Consonant initial possessor. If the L tone does not delete then the genitive marker must be pronounced, otherwise it yields a wrong output.

- (107) a.    ilu      bàtá  
              drum  
              'the bata type of drum'
- b.    ilù      u      bàtá  
              drum MTS b.  
              'the bata type of drum'

- c. \*ìlù bàtá

Before a V-initial possessor, Déchaine contends that genitive L-deletion is obligatory, as long as the initial vowel of the second noun (the Possessor) does not bear L, (108).

- (108) c. pàtàkì ẹmu  
importance palm wine
- b. \*pàtàkì ẹmu  
importance palmwine  
'the importance of palm wine'
- c. \*pàtàkì i ẹmu  
importance MTS palmwine (adapted from Déchaine 2001: 102)

Déchaine further observes that if an initial vowel of the possessor bears L tone, then Genitive L-deletion doesn't apply (109a), nor does the MTS surface, (109b). In this case, the possessum surfaces with its lexical L tone throughout, (109c).

- (109) a. \*ìlu ògá
- b. \*ìlu u ògá
- c. ìlù ògá  
'master's drum'

Observe that all the nouns discussed so far that undergo L-deletion have L tone throughout. Now consider nouns, which have only a final L-tone.

- (110) a. pákò HL  
'chewing stick'
- b. ọkọ ML  
'motor'
- c. onílù MHL  
'drummer'
- d. ìwàkiwà LLML  
'bad character'
- e. alápatà MHML  
'butcher'

When such nouns are put into genitive constructions where they function as possessums, L-deletion is not possible, (111). In (112), when L-deletion is enforced on the possessum, the output is ungrammatical.

- (111) a. pákò o Kúnlé  
          ‘Kúnlé’s chewing stick’
- b. ọkọ ọ Kúnlé  
          ‘Kúnlé’s motor’
- c. onílù u Kúnlé  
          ‘Kúnlé’s drummer’
- d. ìwàkiwà a Kúnlé  
          ‘Kúnlé’s bad character’
- e. alápatà a Kúnlé  
          ‘Kúnlé’s butcher’
- (112) a. \*páko Kúnlé       \*HL       >    HM
- b. \*ọkọ Kúnlé       \*ML       >    MM
- c. \*onílu Kúnlé       \*MHL       >    MHM
- d. \*ìwàkiwa Kúnlé   \*LLML       >    LLMM
- e. \*alápata Kúnlé   \*MHML       >    MHMM

The fact the final L in all the possessums cannot delete indicates the L-tone of the possessum does not freely delete.

There is one more thing to test even with a possessum that allows L deletion: this is whether the size of the possessum NP is in any way a crucial factor in determining L deletion. This I test with examples in (113-115) where the possessum consists of two, three and five syllables respectively. As the output reflects, each of them triggers L deletion. This suggests that the size of the possessum is not a conditioning factor for L deletion.

- (113) a. àşà a Kúnlé  
          customMTS K.  
          ‘Kúnlé’s habit’
- b. àşà Kúnlé  
          customK.

- (114) a. ògèdè ẹ Kúnlé  
 banana MTS K.  
 ‘Kúnlé’s banana’
- b. ògèdẹ Kúnlé  
 banana K.
- (115) a. àgbààgbà a Bèyìòşe  
 elder MTS  
 ‘Bèyìòşe’s elders’
- b. àgbààgba Bèyìòşe  
 elder B.

I now turn to the syntactic contexts of L deletion. Following Déchaine (1993, 1997, 2001), I propose that just as L deletion of a monosyllabic verb is syntactically determined, L deletion in genitive constructions is also syntactically conditioned. Nominal L deletion is restricted to genitive constructions; thus, if the second entity is not a possessor there cannot be L deletion. One context that we test is when possessum nouns take a modifier. As the following examples show, the final L tone of the nouns is obligatorily retained.

- (116) *NP + Modifier*
- a. àşà burúkú \*àşà burúkú  
 custom bad  
 ‘bad customs’
- b. ẹwù funfun \*ẹwu funfun  
 garment white  
 ‘white garment’
- c. ìrù gígùn \*ìru gígùn  
 tail long  
 long tail’
- d. ìgò kékeré \*ìgo kékeré  
 bottle small  
 ‘small bottle’
- e. àpò pẹlẹbẹ \*àpo pẹlẹbẹ  
 bag flat  
 ‘flat bag’

This contrasts with (117) where the modifier is replaced with a possessor. Note that both the modifiers in (116) and the possessors in (117) begin with a consonant. Thus while the L tone of the base is retained in (116), it deletes in (117) and consequently a default M tone is assigned.

(117) *Possessum NP + Possessor NP*

|    | Input                                   | Output     |
|----|-----------------------------------------|------------|
| a. | àṣà    μ    Kúnlé<br>'Kunle's habits'   | àṣa Kúnlé  |
| b. | ẹ̀wù    μ    Kúnlé<br>'Kunle's garment' | ẹ̀wu Kúnlé |
| c. | ìrù    μ    Kúnlé<br>'Kunle's tail'     | ìru Kúnlé  |
| d. | ìgò    μ    Kúnlé<br>'Kunle's bottle'   | ìgo Kúnlé  |
| e. | àpò    μ    Kúnlé<br>'Kunle's bag'      | àpo Kúnlé  |

If any of these modifiers changes its category from modifier (118a) to noun (118b), then, L deletion becomes possible.

|          |                                                     |                                |
|----------|-----------------------------------------------------|--------------------------------|
| (118) a. | ìgò    dúdú<br>bottle black<br>'black bottle'       | = dúdú is a modifier           |
| b.       | ìgo    Dúdú<br>bottle D.<br>'the bottle of Mr. Dudu | = dúdú is a noun <sup>37</sup> |

Finally, L deletion within the Possessum NP is not restricted to the Possessum. If the Possessum takes a modifier that bears L tone throughout as in (119), we observe that the L-deletion rule still applies to the final vowel of the modifier, (120).

<sup>37</sup> See Awóbùlúyì (2004) for relevant discussion.



- (119) a. [Àpò gùdùgbẹ ẹ Kúnlé] jábọ  
 bag bulge MTS K. fall-off  
 ‘Kunle’s bulging bag fell off’
- b. [Ìgbà àìmọ ọ̀n wa] ni Ọ̀lórún fojúfòdá  
 time ignorant MTS 1pl FOC God overlook  
 ‘Our time of ignorance has been overlooked by God’
- c. Àkọ pàlàbà a Gbàdà sọ̀nù  
 sheath flat MTS Gb. miss  
 ‘Gbada’s flat sheath is missing.’
- (120) a. [Àpò gùdùgbẹ Kúnlé] jábọ  
 bag bulge K. fall-off  
 ‘Kunle’s bulging bag fell off’
- b. [Ìgbà àìmọ wa] ni Ọ̀lórún fojúfòdá  
 time ignorant 1pl FOC God overlook  
 ‘Our time of ignorance has been overlooked by God’
- c. Àkọ pàlàbà Gbàdà sọ̀nù  
 sheath flat Gb. miss  
 ‘Gbada’s flat sheath is missing.’

I have established that the L deletion that takes place in genitive constructions corresponds to genitive marking in Yorùbá. In such cases, the segment whose inherent L tone deletes is assigned the M-tone of genitive mora that has no segmental content underlyingly. This is another piece of evidence in support of Déchaine’s (2001) claim that there is a high degree of interdependency between phonology and syntax in Yorùbá such that the knowledge of one greatly helps the understanding of what goes on in the other. L-deletion is a morphosyntactic phenomenon that is phonologically conditioned. This is because deletion itself is, by its very nature, phonological. But the process is conditioned by syntax; it takes place in a genitive construction. The problem that I address next shows that L-deletion and MTS are in fact two sides of the same coin.

#### 2.4.5.1 The necessary and sufficient conditions for L-deletion

Recall the three questions that I set out to address regarding L-deletion. First is to find out if the possessum ending with a segment bearing L tone suffices for L deletion or do we look beyond the last segment of the possessum. Second is to test if it is possible to delete the final H tone of the possessum NP. Third is to establish how crucial is the element that follows the possessum (possessor versus modifier)

as a determining factor for L-deletion to take place. My finding shows that before L deletion can take place, the possessum NP or the modifier to the possessum NP must bear L tone throughout. I also established that when a possessum or its modifier ends in H tone, it couldn't delete for purposes of marking the genitive construction. And finally we saw that for L deletion to take place in a Yorùbá DP, the targeted element must be (part of) a possessum NP in a genitive construction.

#### 2.4.5.2 MTS and L-deletion are in complementary distribution

The last issue to discuss is the relationship between the occurrence of the MTS and this L-deletion. My claim is that the substitution of the M-tone for the deleted L tone is formally equivalent to the genitive marker. In particular, I will show that L tone deletion occurs whenever the MTS is not pronounced.

- (121) a. If MTS is pronounced, then no L deletion  
b. If MTS is not pronounced, then L deletes

First, I present data that show that whenever the MTS is pronounced, L-deletion cannot take place (122)-(124).

- (122) a. àṣà a Kúnlé  
'Kunle's habit'  
b. \*àṣa a Kúnlé
- (123) a. ògèdè ẹ Kúnlé  
'Kunle's banana'  
b. \*ògèdẹ ẹ Kúnlé
- (124) a. àgbààgbà a Bèyìòṣe  
'elders of Beyiose'  
b. \*àgbààgba a Bèyìòṣe

Second, I present data that show that whenever the MTS is not pronounced, L deletion must take place (125)-(127). This is irrespective of the number of the syllables of the possessum NP. Cases where the MTS is absent and we fail to delete the final L tone as shown in the (b) examples are unattested.

- (125) a. àša Kúnlé  
'Kunle's habit'

---

|       |    |                                |         |
|-------|----|--------------------------------|---------|
|       | b. | *àṣà                           | Kúnlé   |
| (126) | a. | ògèdè<br>'Kunle's banana'      | Kúnlé   |
|       | b. | *ògèdè                         | Kúnlé   |
| (127) | a. | àgbààgbà<br>'Beyiose's elders' | Béyìòṣe |
|       | b. | *àgbààgbà                      | Béyìòṣe |

In summary, I have argued that the overt realization of MTS and L-deletion of the final vowel of the possessum NP are two sides of the same coin: when MTS is pronounced, we do not delete; when MTS is not pronounced, we must delete.

## 2.5 Conclusion

I have discussed four major themes relating to genitive constructions in Yorùbá. The first two themes dealt with the semantics and the syntax of genitive constructions. First, I proposed that at the semantic level, there is an R relation between the two arguments in a genitive construction. I made the same claim at the syntactic level by claiming that *v* is the (morphosyntactic) realization of the (semantic) R relation. I argued that the relational head *v* may be null (in nominal genitives) or it may be pronounced (in verbal genitives). Still on the syntax of Yorùbá genitives, I demonstrated that both nominal and verbal possessive constructions derive from the same base structure: a *vP* shell. The surface structure of both involves movement: while the possessum moves to Spec DP in nominal genitive constructions, it is the possessor that moves to Spec IP in verbal possessive constructions. I also claimed that the MTS that appears between the possessum and the possessor in the nominal genitive occupies D. Evidence for the raising analysis is found in the account of the phonological content of the genitive marker, which takes the form of the mid tone syllable. My account revealed that the MTS can be analyzed as a syntactically conditioned mora. This implies that while syntax determines where we get the morpheme, phonology determines its form and when it is to be pronounced.



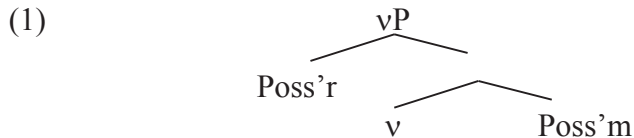
## Chapter 3

### *ti*-Genitives as Reduced Relative Clauses

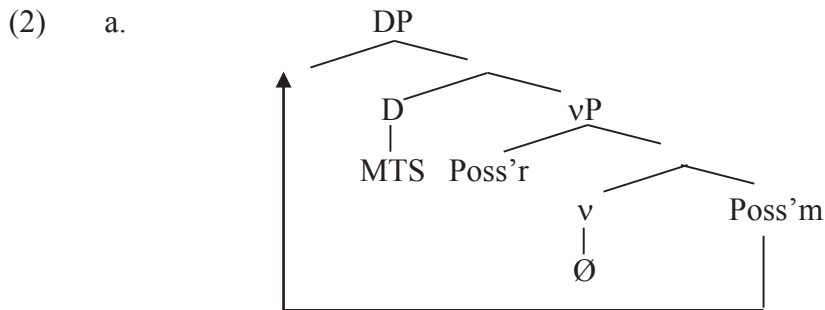
---

#### 3 Introduction

Chapter 2 established that there is a parallel between the semantic and syntactic structures of the two arguments that are in a genitive relation (R). Thus in (1), the possessor and the possessum are linked together by *v* (which instantiates the R relation). The possessor occupies the Specifier position of the *v*P shell whereas the possessum is the complement of *v*.



In the surface syntax of Yorùbá genitives I argued that the nominal genitive and the verbal possessive both derive from the base structure in (1). In the nominal genitive there is a DP superstructure, which hosts the MTS in D as in (2a). The example in (2b) illustrates this.



- b.      ilé      e      Kúnlé  
           house MTS K.  
           'Kunle's house'

Similarly, in the verbal genitive, there is an IP superstructure that hosts the HTS in

I(NFL) as in (3a) with the example in (3b) as an illustration.

- (3) a.
- 
- ```

graph TD
    IP --> I
    IP --> vP
    I --> HTS
    vP --> Poss'r
    vP --> v
    v --> ni[ní]
    Poss'r --> Poss'm
    HTS --> IP
  
```
- b. Òkè é ní ilé
O. HTS have house
'Oke has a house.'

With nominal genitives the possessum raises to Spec DP whereas with verbal possessives, it is the possessor that raises to Spec IP. And while the *v* position is null in genitive DPs, in the verbal possessives, the verb *ní* 'have' occupies *v*.

In this chapter, I extend the analysis to genitive constructions that contain the element *ti*. Four such constructions will be discussed. First, I establish a relation between the genitive M-tone *ti* construction (4a) and the H-tone *tí* relative clauses (4b).

- (4) a. ère **ti** Kúnlé N ti N
statue C K.
'statue of Kunle'
- b. ère **tí** Kúnlé ni N tí N VP
statue C K. own
'The statue that Kunle owns'

Second, I discuss the relationship between the *ti*-genitive and the MTS. In particular, in addition to the MTS and *ti* occurring by themselves, as in (5a-b), they may also co-occur as in (5c).

- (5) a. ère **e** Kúnlé N MTS N
statue MTS K.
'Kunle's statue'
- b. ère **ti** Kúnlé N ti N
statue C K.
'statue of Kunle'

c.	ère	e	ti	Kúnlé	N	MTS	ti	N
	statue	MTS	C	K.				
	'statue of Kunle'							

Third, I consider the co-occurrence of *ti* with the verb *jé* in verbal possessor constructions.

(6)	Owó	jé	ti	Kúnlé	N	jé	ti	N
	money	is	C	K.				
	'The money is to Kunle.'							

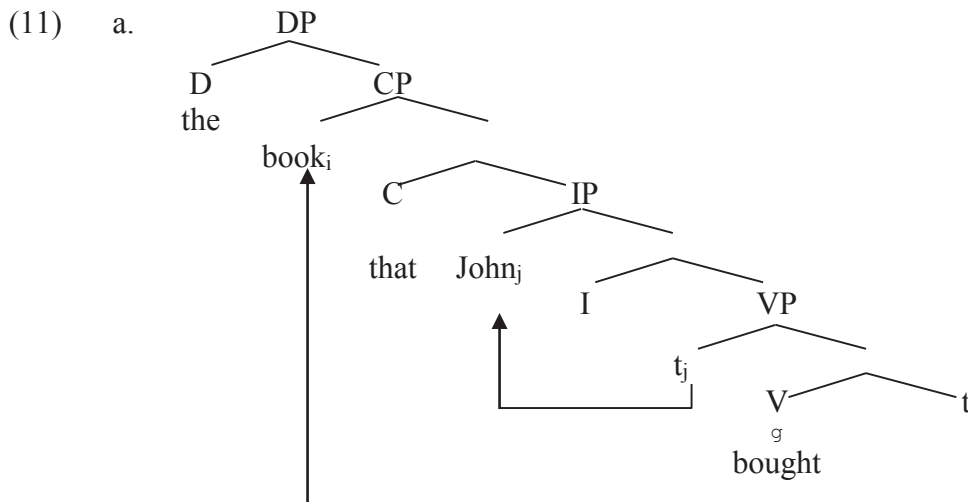
Fourth, I compare the M-tone *ti* found in genitive environments and the M-tone *ti* found in non-genitive environments e.g. the M-tone *ti* that functions as a P with preverbal locatives (7a) and the M-tone *ti* that functions as a P in post-verbal locatives (7b).

(7)	a.	Mo	[ti	ibè]	dé	ní ààrò	ti	N	V
		1sg	P	place	arrive	P morning			
		'I got back from there in the morning.'							
	b.	Mo	dé	[láti	Kánádà]		V	ti	N
		1sg	arrive	P	Canada				
		'I arrived from Canada.'							

My proposal is two-fold. I argue that there are instances where M-tone *ti* behaves like a complementizer and instances where it behaves like a preposition. I propose that the *ti* in genitive constructions is to be analyzed as C, the head of a reduced relative clause. Second, the *ti* in non-genitive constructions is to be analyzed as P, the head of a prepositional phrase. What all these constructions have in common is the presence of the *ti* element. The chapter is organized as follows. In §3.1, I discuss the parallel between *ti* genitives and *tí* relative clauses. §3.2 discusses the co-occurrence of the Mid Tone Syllable with genitive *ti* in relation to Case assignment. In §3.3, I give an account of the co-occurrence of the copula *jé* with genitive *ti*. §3.4 deals with the prepositional use of *ti*. §3.5 concludes.

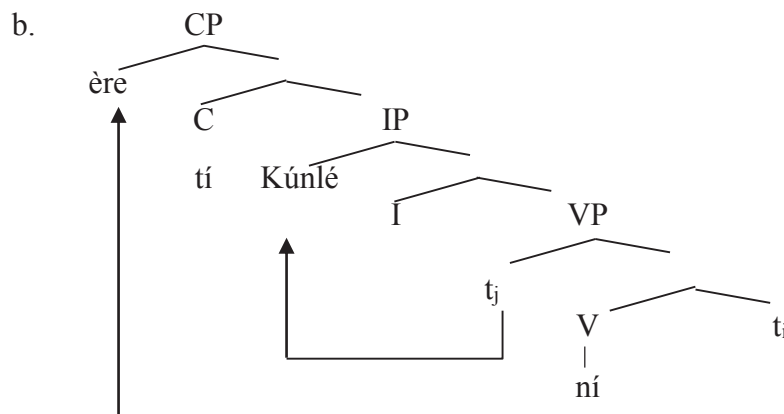
3.1 The parallel between *ti* genitives and *tí* relative clauses

This section addresses the parallel that exists between M-tone *ti* that occurs in genitive construction (8a) and the H-tone *tí* that occurs in relative clause (8b).



Applying the same analysis to Yorùbá let us examine cases involving movement of object NPs. Consider (12a). As shown in (12b), the possessum *ère* ‘statue’ raises to Spec CP.

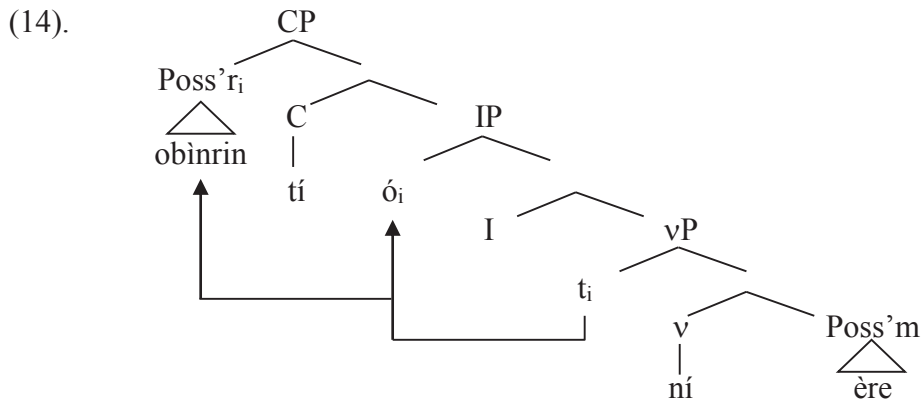
- (12) a. *ère tí Kúnlé ní* _
statue C K. own
‘the statue that Kunle owns’



It is equally possible for the subject NP to raise as in (13). When this happens in Yorùbá, there is a resumptive pronoun at the extraction site (cf. Carstens 1986, 2003, Takahashi and Yuksek 2004, Aboh 2005).

- (13) a. obìnrin_i tí ó_i ní ère
 woman C RP have statue
 ‘the woman that has a statue’
- b. ọ̀kùnrin_i tí ó_i nì ilé
 man C RP own house
 ‘the man that owns a house’
- c. oḡmọ_i tí ó_i jogún ọ̀pẹ
 child C RP inherit palm tree
 ‘the child that inherited a palm tree’
- d. ìyàwó tí ó_i ní agídí
 wife C RP have stubborn
 ‘the wife that is stubborn’

I illustrate this with example (13a) as (14). The raised subject NP moves from Spec vP to Spec CP. The resumptive pronoun is spelled out in Spec, IP.

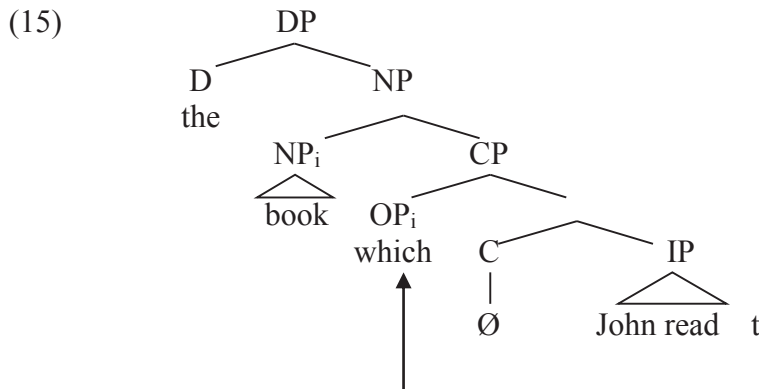


I turn to the second type of analysis that has been proposed in the literature, namely relative clauses as adjuncts to NP.

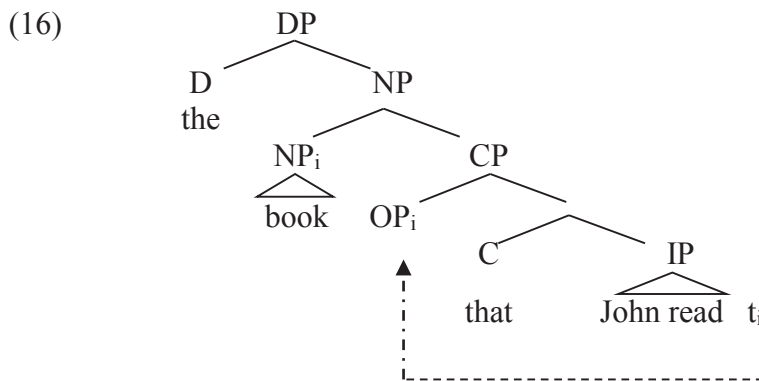
3.1.1.2 Relative clauses as adjuncts to NP

In what has become the standard account (cf. Carnie 2002 among others), relative clauses are treated as adjuncts. In that approach, a relative clause is adjoined to the head NP and the Head of the relative clause is generated outside the relative clause. The WH-pronoun that appears in these relative clauses is treated as an operator (OP). The operator is base-generated in the object position and raises to Spec CP;

this movement is internal to CP.

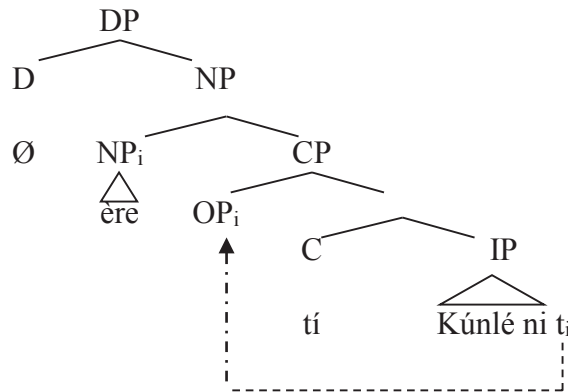


Observe also that the Wh-operator, *which* is co-indexed with the head of the relative clause *book*. The co-indexation is to show that “book” and “which” are the same. In the case under review, movement of the operator is overt. Even, when there is no overt operator, it is still assumed that there is covert movement of the operator from the object position to CP, (16).



Using the same approach for Yorùbá yields (17): the head noun *ère* ‘statue’ is generated outside the CP, and this CP is adjoined to the NP. The null operator covertly moves to the Spec CP from its object position and is co-indexed with the head noun.

(17)



Analyzing Yorùbá data using the adjunct clause analysis makes no distinction between a relative clause that has a complementizer and one that has a relative pronoun because there is no overt OP in this context. In Yorùbá, only the C position is pronounced. The kind of Wh-elements that would function as operators in Yorùbá do not appear in relative clauses. This is what I show in (18) and (19) where only the (a) examples are grammatical in the sense that the presence of *èwo* ‘which’, (18a) and *ta* ‘who’, (19a) is allowed in Wh-constructions and not in relative clauses as the ungrammaticality of the (b) examples show.

- (18) a. Ìwé **èwo** ni o rà *wh-question*
 book which Foc 2sg buy
 Which book did you buy?
- b. *Ìwé **èwo** o rà *relative clause*
 book which 2sg buy
- (19) a. Ajá a **ta** ni o rí *wh-question*
 dog MTS whose Foc 2sg see
 ‘Whose dog did you see?’
- b. *Ajá a **ta** o rí *relative clause*
 dog MTS who 2sg see
 [the dog of who that you saw]

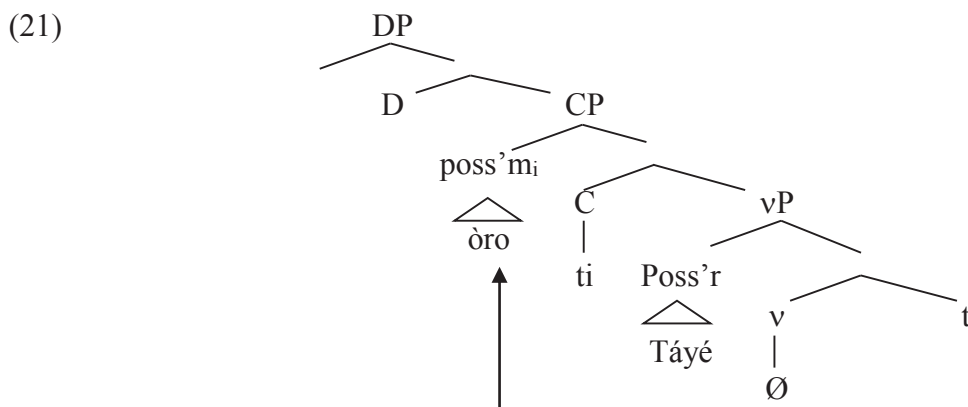
This tells us that unlike English, Yorùbá has no relative pronouns, as such the Spec CP will always be null and movement of OP will always be covert. Next, I turn to the account that establishes that genitive *ti* and complementizer *tí* spell out C.

3.1.2 *ti* genitives are reduced relative clauses

I argue that *ti* genitives are reduced relative clauses and the head of this reduced relative clause takes a vP clause as its complement. First, observe that the *ti*-genitives shown in (20) have the surface structure of “N *ti* N”. As with any other type of genitive DPs, N-*ti*-N expressions occur in the range of argument positions e.g. in subject position (20a) and object position (20b).

- (20) a. [Òro **ti** Táyé] dùn subject
 mango of T. sweet
 ‘The mango of Taye is sweet.’
- b. Mo fọ [àgbọn **ti** Jẹnrólá] object
 1sg break coconut of J.
 ‘I broke the coconut of Jenrola.’

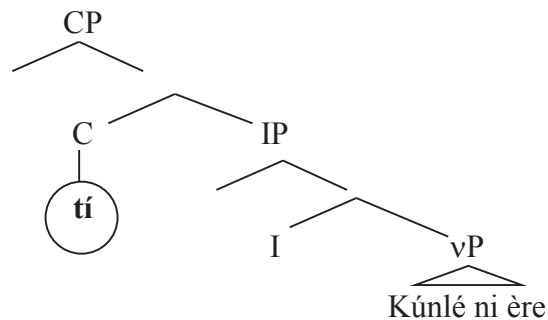
How are the N-*ti*-N expressions analyzed as reduced relative clauses? Starting with the proposal of a single base-structure for all genitives in Yorùbá, a CP layer is introduced above the base structure as in (21). The *ti* element, like a true complementizer, occupies C and it takes the vP as its complement. The possesum NP (*òro*, ‘mango’) moves from the vP-internal complement position to Spec CP.



One consequence of this proposal is that it brings to light the relationship between the M-tone *ti* genitive marker and the H-tone *tí* relative marker. In particular, in the proposed analysis, they both spell out C. The contrast between the two is further illustrated in (22) where H-tone *tí* heads a full relative clause and in (23) where M-tone *ti* heads a reduced relative clause.

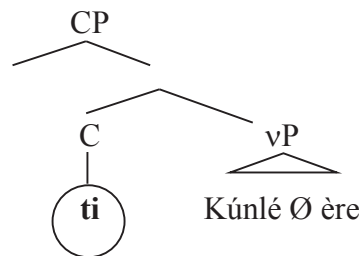
- (22) a. ère tí Kúnlé ni –
 statue C K. own
 ‘the statue that Kunle owns’

b. *full relative clause*: H-tone tí



- (23) a. ère ti Kúnlé Ø –
 statue C K.
 ‘statue of Kunle’

b. *reduced relative clause*: M-tone ti



Further, while the M-tone *ti* found in a reduced CP can only take a small vP shell as its complement, the H-tone *tí* found in a full CP can only take an IP as its complement.

Compared to a full relative clause, the reduced relative clause is deficient in two ways. First, a full CP has an IP (22a), which is lacking in the reduced relative clause, (23b). The reduced relative clause can only take a small vP as its complement.

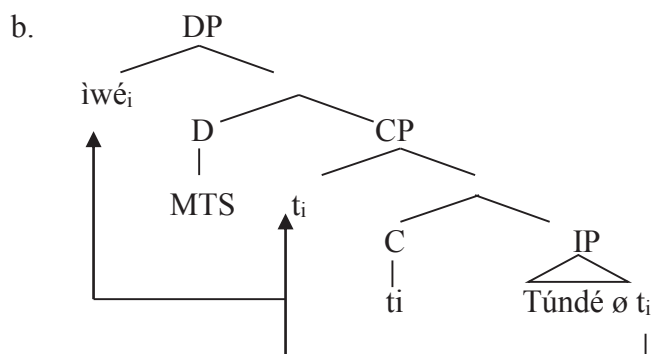
The second deficiency of a reduced CP is that M-tone *ti* contrasts with the H-tone *tí* of a full relative clause with respect to the tone. Observe that it is a general property of Yorùbá complementizers that they require H-tone (Déchaine 1993). I show this with H-tone *kí* in (24a), H-tone *pé* (24b) and a combination of *pé* and *kí*, both of which bear H tone (24c). As already shown, the C of a reduced relative clause bears M tone.

- (24) a. Mo gbà kí Adé wá
 1sg admit C A. come
 'I admitted that Ade should come.'
- b. Mo gbà pé Adé wá
 1sg admit C A. came
 'I admitted that Ade came.'
- c. Mo gbà pé kí Adé wá
 1sg accept C C A. came
 'I accepted that Ade should come.'

Despite these deficiencies, the claim that M-tone *tí* in a reduced relative clause is a C still holds in the sense that it takes a clause (vP) as its complement.

Apart from the fact that H-tone *tí* and M-tone *tí* are analyzed as complementizers, the issue of the landing site for the moved NP is also very significant. In the full relative clause, the raised NP lands at Spec, CP. However, in a *tí* genitive construction, it is possible for the NP to raise to Spec CP as in (21) above or out of Spec CP to Spec DP when D is pronounced. As shown in (25), the D position is pronounced as M-tone (here [e]). It is the possibility of raising from Spec CP to Spec DP which accounts for the co-occurrence of the MTS (in D) with M-tone *tí* (in C).

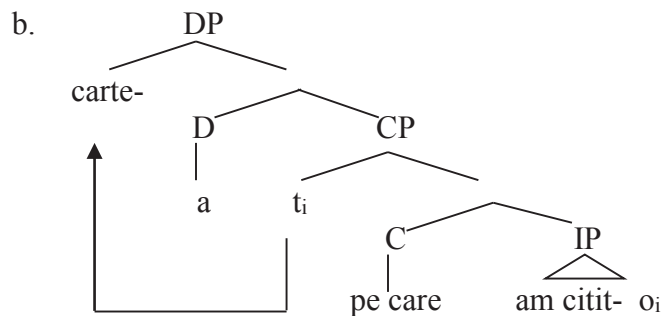
- (25) a. [DP iwé [D e [CP [C tí [vPTúndé [v Ø [t_i]]]]]
 book MTS T.
 'Tunde's book'



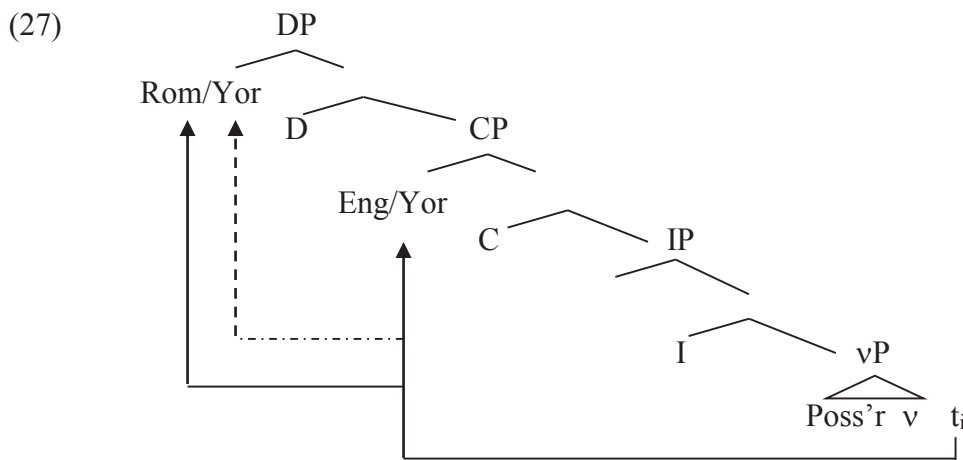
Yorùbá is not the only language whose NP can raise past Spec CP. This is also attested in Romanian. In fact it is obligatory for the raised NP to move as far as Spec DP. The example in (26a) and the structure in (26b) illustrate this: *carte* 'book' moves from the complement of the verb *citit* 'read' first to Spec CP and finally to

Spec DP.

- (26) a. *carte-a* *pe care* *am* *citit-o*
 book-the *pe* which I.have read-it (Kayne 1994: 88)



The summary of the similarities and differences among Yorùbá, English and Romanian is given in (27). It shows that the three languages can have their object NP raised to Spec CP. While English NP must not raise past Spec CP, Romanian obligatorily raises to Spec DP. Yorùbá NP on the other hand can either raise to Spec CP and stop, or it can raise to Spec DP if D is pronounced.



The factor that determines how far an NP can raise in Yorùbá therefore is the presence or the absence of the MTS. The generalization is this. One, when D is not pronounced, Yorùbá NP remains in Spec CP, as in (28a). This is the case with full relative clauses and reduced relative clause that lack overt D. Two, when D is pronounced, Yorùbá behaves like Romanian in the sense that the object NP must raise to Spec DP, as in (28b). This accounts for the co-occurrence of MTS with M-tone *ti*.

- (28) a. [CP ìwé_i [C tí] [IP Túndé ni t_i]
 book that T. own
 ‘the book that Tunde owns’
- b. [DP owó [D o [CP t_i [C tí Túndé ø t_i]
 money MTS of T.
 ‘money of Tunde’

The table in (29) below captures the case of raising in the three languages discussed here.

(29) *Raising within the genitive construction in Yorùbá, Romanian and English*

	Yorùbá	Romanian	English
movement to Spec CP	√	X	√
movement to Spec DP	√	√	X

Finally, there is one major difference between a relative clause and a *ti*-genitive that I need to point out. Apart from the possibility of raising the possessum/object, (30a) it is also possible for the possessor/subject to raise in a full relative clause, (30b).

(30) *full relative clause*

- a. [CP ìwé_i [C tí [IP ọmọ rà t_i]]] *obj/poss'm raising*
 book that child buy
 ‘the book that the child bought’
- b. [CP ọmọ_i [C tí [IP ó_i ra ìwé]]] *subj/poss'r raising*
 child that RP buy book
 ‘the child that bought the book’

However, possessor raising does not take place in a *ti*-genitive, as seen by the contrast between (31a) and (31b).¹ The ungrammaticality of (31b) is because it is the subject/possessor that is raised. The failure of possessor raising in nominal genitive is due to the linear order restriction: the possessum must precede the possessor in nominal genitives.

(31) *Genitive DP with ti-construction*

- a. [CP òro_i [C tí [vP Kúnlé [vØ t_i]]] *obj/poss'm raising*
 mango of K.
 ‘the mango of Kunle’
- b. *[CP Kúnlé_i [C tí [vP t_i [vØ òro]]] *subj/poss'r raising*
 K. of

¹ A subject NP in a full relative clause = a possessor NP in a reduced relative clause. Similarly, an object NP in a full relative clause = a possessum NP in a reduced relative clause.

The disparity in raising might relate to another diagnostic measure for reduced and full relative clauses. Reduced relative clauses are found only in genitive constructions whereas full relative clauses are not restricted; as such, they can be found in genitive or non-genitive constructions. To allow the subject to raise in reduced relative clauses is to derive an unattested output. These differences are summarized in (32).

(32) *Distinction between full CP and reduced CP*

	H-tone <i>tí</i> = full relative clause	M-tone <i>tí</i> = reduced relative clause
Object/possessum raising	√	√
Subject/possessor raising	√	X

The main claim so far is that the M-tone *tí* constructions involve a reduced relative clause whereas the H-tone *tí* constructions involve a full relative clause. The next task is to show that the proposal is independently motivated. I will demonstrate that H-tone *tí* is consistent with Spec-Head agreement² in C, and that this occurs in the extended verbal domain. Similarly, I will show that M-tone *tí* is consistent with Spec-Head agreement in C and that this occurs in the extended nominal domain. I will support this parallel with other parallels between HTS in I(nfl) and MTS in D, and H-tone *ní* and M tone *ni*. These parallels between H-tone and M-tone elements are summarized in (33).

(33) *Parallels between H-tone and M-tone elements in Yorùbá*

	H-tone <i>tí</i>	H-tone <i>ní</i>	HTS	M-tone <i>tí</i>	M-tone <i>ni</i>	MTS
Nominal	x	x	x	√	√	√
Verbal	√	√	√	x	x	x

The discussion in the four subsections is organized as follows. In §3.1.2.1, I establish the parallel between M-tone *tí* and H-tone *tí* in terms of agreement. The discussion in §3.1.2.2 focuses on the similarity between the MTS that occupies D and HTS that occupies I(nfl). In §3.1.2.3 I show that the same parallel exists between the M-tone *ni* that introduces nominal predicates and the H-tone *ní* that introduces verbal predicates. §3.1.2.4 summarizes the significance of H-tone/M-tone alternations.

² cf. Déchaine 1993's "default agreement".

3.1.2.1 M-tone *tí* and H-tone *tí*

There are two considerations that support the claims that the M-tone *tí* construction involves a reduced relative clause whereas the H-tone *tí* construction involves a full relative clause: theory internal and language internal (i.e., empirical) evidence. On the latter, I argue that the H-tone *tí* is an Agreeing Complementizer marking Spec-Head agreement in the extended verbal domain, whereas the M-tone *tí* is an Agreeing Complementizer that shows up in the extended nominal domain³.

There is some indication that agreement as the head of the subject relative clause is associated with a resumptive pronoun, which may or may not agree with its antecedent.⁴ The fact that there is some form of agreement is an indirect evidence in support of my claim that H-tone *tí* shows Spec-Head agreement in Yorùbá. For example, a 1st or 2nd person antecedent may be associated with a resumptive pronoun, which agrees in person and number, or the resumptive pronoun may surface in the 3rd person form. This is shown for 1st person (singular and plural) as well as 2nd person (singular and plural) in examples (34)-(37).

- (34) a. Èmi tí **mo** ní ère tà á
 1sg C 1sg have statue sell 3sg
 ‘I that own a statue sold it.’
- b. Èmi tí **ó** ní ère tà á
 1sg C 3sg have statue sell 3sg
 ‘I that own a statue sold it.’
- (35) a. Ìwọ tí **o** ní ère tà á
 2sg C 2sg have statue sell 3sg
 ‘You that own a statue sold it.’
- b. Ìwọ tí **ó** ní ère tà á
 2sg C 3sg have statue sell 3sg
 ‘You that own a statue sold it.’
- (36) a. Àwa tí **a** ní ère tà á
 1pl C 3pl have statue sell 3sg
 ‘We that own a statue sold it.’
- b. Àwa tí **ó** ní ère tà á
 1pl C 3sg have statue sell 3sg
 ‘We that own a statue sold it.’

³ Cf. *quel/qui* alternation as a form of agreement in French.

⁴ See Déchaine (1993) for a treatment of the 3rd person singular form in Yorùbá as default agreement.

- (37) a. Èyin tí ẹ ní ère tà á
 2pl C 2pl have statue sell 3sg
 'You that own a statue sold it.'
- b. Èyin tí ó ní ère tà á
 2pl C 3sg have statue sell 3sg
 'You that own a statue sold it.'

As for the 3rd person forms, with 3sg there is no alternation between the agreeing form and the non-agreeing form of the resumptive pronoun since the resumptive pronoun is itself 3sg, (38).

- (38) a. Òun tí ó ní ère tà á
 3sg C 3sg have statue sell 3sg
 'S/he that owns a statue sold it.'
- b. Ọkùnrin tí ó ní ère tà á
 man C 3sg have statue sell 3sg
 'The man that owns a statue sold it.'

Finally, a 3rd person plural pronoun (39) or common noun (40) antecedent may be associated with a resumptive pronoun, which agrees in person and number, as in the (a) examples or the resumptive pronoun may surface as 3sg, as in the (b) examples.

- (39) a. Àwọn tí wọn ní ère tà á
 1pl C 3pl have statue sell 3sg
 'They that own a statue sold it.'
- b. Àwọn tí ó ní ère tà á
 1pl C 3sg have statue sell 3sg
 'They that own a statue sold it.'
- (40) a. Ọkùnrin méjì tí wọn ní ère tà á
 man two C 3pl have statue sell 3sg
 'The two men that own a statue sold it.'
- b. Ọkùnrin méjì tí ó ní ère tà á
 man two C 3sg have statue sell 3sg
 'The two men that own a statue sold it.'

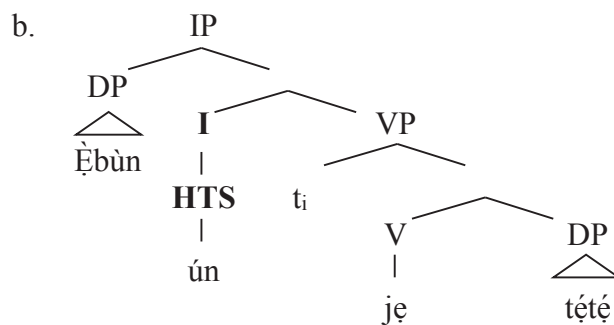
I conclude that the agreement that optionally shows up between the head of subject

relative clause and its resumptive supports the assumption that H tone *tí* is an indication of agreement in a relative clause.

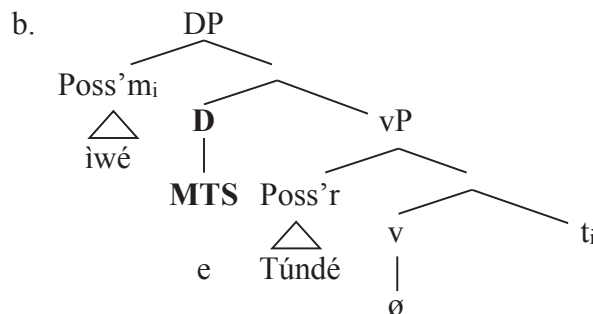
3.1.2.2 MTS and HTS

Another parallel between H-tone *tí* and M-tone *ti* relates to the HTS found in I(infl) in the verbal domain and the MTS found in D in the nominal domain. In Yorùbá, HTS is obligatory between a full DP subject and a bare verb (Déchaine 1993:457). While the HTS instantiates Spec, Head agreement in IP (41), MTS spells out Spec, Head agreement in DP, (42).

- (41) a. Èbùn **ún** jẹ tètẹ
 E. HTS eat lottery
 ‘Ebun won a lottery.’



- (42) a. ìwé **e** Túndé
 book MTS T.
 ‘Tunde’s book’



I suggest that just as HTS in the verbal domain parallels MTS in the nominal domain, so too does the H-tone *tí* of full relative clauses parallel the M-tone *ti* of the reduced relative clauses. Moreover, just as HTS occurs in the verbal domain so does H-tone *tí*. And just as MTS occurs in the nominal domain, so does M-tone *ti*.

3.1.2.3 H-tone *ní* and M-tone *ni*

I will now show that the contrast between H-tone *ní* and M-tone *ni* provides another indirect support for the claim that H-tone *tí* spells out Spec-Head agreement when CP dominates IP, while M-tone *ti* spells out Spec-Head agreement when CP dominates a defective nominal clause. The occurrence of the H-tone *ní* in a clause shows a verbal predicate ‘have’. That this *ní* is a verb is confirmed by the presence of the HTS, (43a). The ungrammaticality of (43b) shows that whenever verbal H tone *ní* is present, it is obligatory for the HTS to be present.

- (43) a. Àgbè é ní owó
 farmer HTS have money
 ‘A farmer has money.’
- b. *Àgbè Ø ní owó
 farmer have money

The behaviour of H-tone *ní* contrasts with M-tone focus/copular *ni*, which is never preceded by HTS. This is because, as observed in Abraham (1958:435), M-tone *ni* is not a true verb as shown by the ungrammaticality of (44b). I assume the absence of HTS with copula *ni* is symptomatic of the fact that this copula only introduces nominal predicates⁵. Thus, when we make it behave like a true verb, which requires a HTS as in (44b) then the output is ungrammatical.

- (44) a. Àgbè ní Tùndé
 farmer be T.
 ‘Tunde is a farmer.’
- b. *Àgbè é ní Tùndé
 farmer HTS be T.

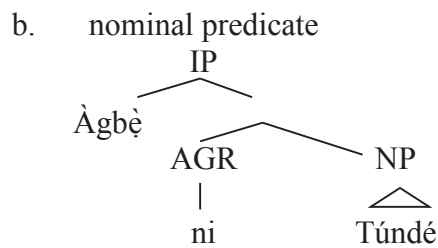
The contrast between H-tone *ní* and M-tone *ni* is illustrated with the structures in:

- (45) a. verbal predicate
- ```

 IP
 / \
 Àgbè / \
 / \
 AGR VP
 | |
 HTS △
 | |
 é ní owó

```

<sup>5</sup> I define predicate along the line of Radford (1997:525) as a nominal expression used as a predicate. Thus, *àgbè* is the predicate of *Tùndé*.



In summary, I have shown that H-tone *tí* and M-tone *ti* have certain things in common that makes it appropriate to analyze them as C: they both take a clause as their complement. I have shown supporting language internal evidence that M-tone *ti* is to be analyzed as the head of a reduced relative clause in nominal domain. Such evidence includes the MTS that occupies D and M tone *ni* in nominal predicates. The final thing that I do is to show the significance of these findings.

### 3.1.2.4 The significance of H-tone/M-tone alternations

To summarize, §3.1.2 has established that both *tí* and *ti* are Agreeing complementizers in Yorùbá. The generalization that emerges is that every occurrence of H-tone mora shows agreement in the verbal or extended verbal domain whereas every occurrence of M-tone mora shows agreement in the nominal domain. This holds of H-tone *tí* versus M-tone *ti*, of HTS versus MTS, and of H-tone *ní* versus M-tone *ni*.

### 3.1.3 The *ti* N construction

I extend the account of genitive DPs as reduced relative clauses to another type of construction in which *ti* appears but which is at least in one respect different from the ones we have so far seen. It contains just the *ti*-element and a possessor NP as opposed to the genitive DPs in reduced relative clauses, which contain Possessum *ti* Possessor. This type of construction has been referred to as ‘Possessive noun phrases with no Possessee’ (Hertz (1997:517), i.e. a genitive DP that lacks an overt possessum NP since the object that is possessed is phonologically null. Because such genitives lack an overt possessum, they must be discourse linked.

- (46) a. Context: Imagine books belonging to *Kúnlé*, *Olú* and *Adé* are missing and somebody asked if I see any of the books, then I replied with (46b).

- b. Mo      rí      [ti      Kúnlé]  
       1sg    see    of      K.  
       ‘I saw Kunle’s.’<sup>6</sup>

<sup>6</sup> Note that though *ti túndé* translates to English Saxon ‘s: Kunle’s, it has a different structure.

The idea of interpreting (46) as a genitive construction raises a number of questions. First is the question of whether there is any semantic and or syntactic relationship between this construction and the type that has an overt possessum NP, compare (47a) that has an overt possessum NP with (47b), which lacks an overt possessum NP.

- (47) a. Mo    rí       [oko   ti       Òjó]  
           Isg   see     farm   C       O.  
           ‘I saw the farm of Ojo.’
- b. Mo    rí       [*pro*   ti       Túndé]  
           Isg   see               C       T.  
           ‘I saw Tunde’s.’

The similarity in meaning between (47a) and (47b) is not in doubt. Again, the only difference is that (47b) cannot be rendered in the out-of-the-blue but it can follow (47a) in discourse. The same is applicable in (48). In an appropriate context, the possessum of *ti Túndé* is recoverable. Since in the context of (48), it has the same interpretation as *aşo ti Kúnlé*, we expect that the syntax will be the same on the basis of the parity in meaning. Note that the occurrence of *aşo* ‘cloth’ in the first genitive DP in (48b) makes its occurrence in the second DP “awkward”.

- (48) a. Mo    rí       [aşo   ti       Òjó],  
           Isg   see     cloth   of     O.  
           şùgbónn   kò    rí       [*pro*   ti       Túndé]  
           but   Isg   NEG   see               of     T.  
           ‘I saw the dress of Ojo but I didn’t see Tunde’s own.’
- b. Mo    rí       [aşo   ti       Òjó],  
           Isg   see     cloth   of     O.  
           şùgbónn   kò    rí       #[aşo   ti       Túndé]  
           but   Isg   NEG   see   cloth   of     T.  
           ‘I saw the dress of Ojo but I didn’t see the dress of Tunde.’

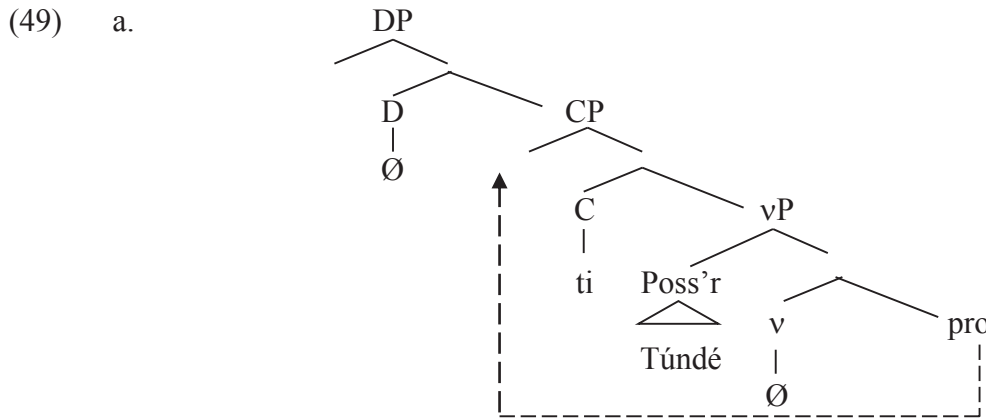
There are two accounts for *ti* N constructions. One claims that *ti* is a complementizer (herein) while the other claims it is a noun (Awóbùlúyì 2004).

### 3.1.3.1 *ti* as Complementizer analysis

We can account for *ti*-constructions that lack a possessum NP the same way we account for *ti*-constructions with an overt possessum NP. As such, I propose that this *ti* element is the same as the one we find in *ti*-genitives, so it must be analyzed as a complementizer. I propose in line with the current analysis that the *ti*-N



construction should be analyzed as a full DP and its possessum NP be represented as a null pronominal (*pro*). In this case, it is the *pro* possessum that covertly moves to Spec CP.



This movement is independently motivated. In cases with an overt possessum, it is obligatory that the possessum raises to Spec CP. As we saw in the earlier account with overt possessums, the *pro* cannot raise beyond Spec CP if the D position is null, otherwise we derive a wrong output, at least in Mòbà (50), where the genitive MTS is invariant /i/.

- (50) \*i      ti      Òjó  
        MTS   C      O.

There is a sharp contrast when we try to compare Yorùbá '*ti* N' and English '*of* N'. For example, the phrases in (51) are not well formed since those PPs cannot exist independently in English.

- (51) a.      \*of John  
        b.      \*of Mary

In English, the possessum NP must be pronounced in *of*-constructions.

- (52) a.      book   of      John  
        b.      house   of      Mary

What accounts for this difference is not presently known. However, the examples in (51) actually have counterparts in so-called Saxon genitive constructions that are well formed (Fukui 1986, Siloni 1997, Hertz 1997).

- (53) a. John's  
b. Mary's

Observe that Saxon ('s) genitives can take 'own' as gap filler for the missing possessum, (54) whereas *of*-genitives cannot, (55).

- (54) a. John's own  
b. Mary's own

- (55) a. \*own of John  
b. \*own of Mary

Finally, the difference between the Saxon 's genitive and the 'of' genitive is probably the reason why it is possible to drop 'own' in the former but not in the latter.

As for the Yorùbá MTS genitives, they do not allow the elision of the possessum NP as shown by the ungrammaticality of (56b).

- (56) a. ilé e Kúnlé  
house MTS K.  
b. \*e Kúnlé

To summarize, under the present account the *ti* in 'N *ti* N' and the *ti* in '*ti* N' are both analyzed as a functional element that occupies C. The data poses a challenge to an alternative analysis, which treats *ti* as an NP. I discuss this other analysis in what follows.

### 3.1.3.2 *ti* as N analysis: Awóbùlúyì (2004)

Awóbùlúyì (2004) argues that the *ti*-element found in nominal environments as discussed in the previous sections is itself a noun, which by implication must have the distribution of a DP. According to Awóbùlúyì:

... the element *ti* must be some kind of nominal... and, therefore, have the feature [+N], since it requires to have the prosthetic vowel *i* attached to its left margin within noun phrases... Pointing in this same direction is the further fact that the element readily enters into construction with the possessive qualifier *rí* 'his/her/its' and, together with the latter, functions as subject or object (Awóbùlúyì 2004:14).

The examples below are used to support this claim. In particular is (57b) where the MTS, which undergoes assimilation, attaches to *ti*.

- (57) a.      ajá      ti      Kúnlé  
              dog      that-of Kunle  
              ‘Kunle’s dog’
- b.      ajá      a-ti      Kúnlé  
              dog      MTS-that-of K.  
              ‘Kunle’s dog’
- (58) a.      Ti      rẹ      pupa  
              that-of his/her/its      be-red/brown  
              ‘His/Hers?its is red or brown.’
- b.      Mo      rí      ti      rẹ  
              I      saw      that-of his/her/its  
              ‘I saw his/hers.’ (Awóbùlúyì 2004: 14-15)

However, the claim made by Awóbùlúyì that *ti* is a kind of noun makes incorrect predictions regarding morphology, semantics, and syntax of *ti*.

First, the morphological shape of all canonical nouns in Yorùbá is minimally VCV. Some representative examples are given in (59).

- (59) a.      owó                              b.      ilú                              c.      edé  
              ‘money’                              ‘town’                              ‘shrimps’
- d.      àpò                              e.      ẹja  
              ‘bag’                              ‘fish’

As for *ti*, it is just a CV. Based on this morphological criterion *ti* does not qualify as a noun. It requires at least a prosthetic vowel to make it conform to the shape expected of most nouns. Though adding /i/ to *ti* as Awóbùlúyì’s work suggests, satisfies the morphological requirement, it creates another problem namely, that no such word as *\*iti* exists in any of the Yorùbá dialects (not even in Mòbà which is famous for its use of vowel /i/ in consonant initial nouns) as the following examples illustrate.<sup>7</sup>

<sup>7</sup> Observe that in Standard Yorùbá, these examples are without this prosthetic vowel. See Ajíbóyè (1991) for relevant data and discussion.

- 
- (60) Mòbà
- |    |                           |    |                            |    |                          |
|----|---------------------------|----|----------------------------|----|--------------------------|
| a. | i-pákó<br>'plank'         | b. | i-koríko<br>'grass'        | c. | i-fèrè<br>'whistle/horn' |
| d. | i-dàda<br>'personal name' | e. | i-bàtá<br>'a kind of drum' |    |                          |

And for consonant initial nouns that allow the *i*-prefix, such nouns must be at least two syllables: CV-CV not one CV as in the case of *ti*. In (61), each example has two forms. The first begins with a consonant the second begins with the prosthetic vowel. They all consist of two syllables (CV-CV)

- (61) Standard Yorùbá/ Mòbà
- |    |                  |          |
|----|------------------|----------|
| a. | yanrìn           | i-yanrìn |
|    | 'sand'           |          |
| b. | bùsùn            | i-bùsùn  |
|    | 'sleeping place' |          |
| c. | bùsò             | i-bùsò   |
|    | 'mileage'        |          |
| d. | lèkùn            | i-lèkùn  |
|    | 'door'           |          |

The second problem is semantics. Either in citation or in context, the meaning of *ti* as a noun is not transparent. While the whole sentence is interpretable in (62a) because each word has its meaning, the sentence in (62b), is not. I trace this to *ti*, which lacks its own meaning because it is a functional element.

- (62) a. Adé rí ìwé  
           A. see book  
           'Ade saw a book.'
- b. \*Adé rí ti

Another piece of evidence is the area of syntax. Let us look at the contrast between *ti* and *bí*. The latter has been treated as a defective noun<sup>8</sup> because it can assign genitive Case (Déchaine 1993, 2001). According to those accounts, this lexical item *bí* can be analyzed as the nominal head of a relative clause, roughly meaning '[the] way [in/by which]'. Déchaine gave five pieces of evidence to show that *bí* is a noun.

---

<sup>8</sup> In my own view, *bí* is defective as noun for the same morphological reason as *ti* is: they both consist of CV only, nouns must be minimally be V-CV. For this reason, I do not consider *bí* a noun as well.

One that is relevant to our discussion assuming that truly *bí* is a noun is that ‘as N, *bí* licenses Genitive Case’ (Déchaine (1993: 95). As such, it can co-occur with genitive NP with an overt marker, i.e., the MTS.

- (63) a. ...kí á ɕiɕé [DP bí i ɛ́rú]  
           that 1pl work way Gen slave  
           ‘...that we work in the manner of a slave’
- b. Jímò ó wí ejó bí i awéwa  
    like Agr say case way Gen grumbler  
    ‘Jimo complains [in] the way of a grumbler’ (Déchaine 1993: 95)

In contrast, *ti* cannot occur with MTS.

- (64) a. \*Mo rí ti i rẹ  
           1sg see of MTS 3sg
- b. \*Mo rí ti i wa<sup>9</sup>  
           1sg see of MTS 1pl

Another piece of evidence that supports the claim that *ti* is not a noun is the use of the MTS as a diagnostic tool. Only when a true possessum NP appears with the possessor must we have the MTS:

- (65) a. iwé \*(e) [Túndé] pupa  
           book MTS T. red  
           ‘Tunde’s book is red.’
- b. tí (\*e) [Túndé] pupa  
           of MTS T. red
- (66) a. iwé \*(e) rẹ pupa  
           book MTS his/her/its red  
           ‘His/Her book is red.’
- b. tí (\*e) [rẹ] pupa  
           of MTS his/her/its red

Further evidence that supports the claim that *ti* is not a possessum noun comes from the fact that it can co-occur with a possessum like *iwé*, as in (67). Thus, *iwé* is neither

<sup>9</sup> For more on the treatment of *bí* as a noun, see also Abraham (1958), Awóbùlúyì (1978), Oyèláràn (1982) and Déchaine (2001).

sitting in the same position as *ti* nor is it referring to the same entity *ìwé*.

- (67)    *Ìwé*    *e*                      *tí*            *rè*                      *pupa*  
           book   MTS                      of            his/her/its            be-red/brown  
           ‘His/Her book is red.’

The final piece of evidence comes from what constitutes a genitive phrase. In a possessive phrase, there is usually one possessor and one possessum. In (67), it is indisputable that *ìwé* and *rí* are the only two nominals. There *ìwé* is the possessum and *rè* is the possessor. For this reason *ti* and *ìwé* cannot both be possessums. In this case, *ti* is not a constituent independent of the noun it follows.

Further, the complement of *ti* i.e., the possessor cannot be stranded. This is illustrated with the example in (69).

- (68)    a.        *Mo*    *rí*        [*ti*    *Adé*]  
                   1sg    see    C        A.  
                   ‘I saw Ade’s.’
- b.        [*Ti*    *Adé<sub>i</sub>*]    *ni*        *mo*        *rí*        [*t<sub>i</sub>*]  
                   of        A.        FOC    1sg        see  
                   ‘It is Ade’s that I saw.’
- (69)        \**Adé*    *ni*        *mo*        *rí*        [*ti*        \_ ]  
                   A.        FOC    1sg        see        of

Since Yorùbá permits movement of the possessor, if this possessor has to move, it must satisfy the stranding condition, (70).

(70)    Stranding Condition

When a Possessor moves, a resumptive pronoun that agrees in number and person is obligatorily inserted at the base position of the moved possessor DP

I show this with the examples in (71) and (72). The violation of this stranding condition, as in the (c) examples, leads to ungrammaticality.

- (71)    a.        [*Ti*    *Adé<sub>i</sub>*]    *ni*        *mo*        *rí*        [*t<sub>i</sub>*]  
                   of        A.        FOC    1sg        see of  
                   ‘It is Ade own that I saw.’

- b. [Adé<sub>i</sub>] ni mo rí [ti rẹ̀i]  
 A. FOC 1sg see of 3sg  
 ‘It is Ade, whose “x” I saw.’
- c. \*Adé<sub>i</sub> ni mo rí [ti t<sub>i</sub>]  
 A. FOC 1sg see of
- (72) a. [Ti Adé àti Olú<sub>i</sub>] ni mo rí [ti]  
 of A. and O. FOC 1sg see  
 ‘It is Ade and Olu’s own that I saw.’
- b. [Adé àti Olú<sub>i</sub>] ni mo rí [ti wọ̀n<sub>i</sub>]  
 A. and O. FOC 1sg see of 3pl  
 ‘It is Ade and Olu, whose “x” I saw.’
- c. \*[Adé àti Olú<sub>i</sub>] ni mo rí [ti t<sub>i</sub>]  
 A. and O. FOC 1sg see of

With all the evidence and arguments above, I conclude that *ti* is not a noun in Yorùbá. Rather, *ti* is a functional head (C). And whenever the possessor moves, *ti* must also move or else there is a resumptive pronoun in place of the moved possessor (cf. Awóyalé 1985).

### 3.1.4 Assigning genitive case to the possessor

There are two things to remind readers about the discussion on the genitive DPs so far. First, in the surface syntax, the two arguments within this phrase are related by the MTS, (73a) or by *ti* in the genitive plus *ti*-construction, (73b).

- (73) a. owó o Kúnlé  
 money MTS K.  
 ‘Kunle’s money’
- b. ère ti Kúnlé  
 statue of K.  
 ‘the statue of Kunle’

Second, both the MTS and the *ti*-element can co-occur, (74).

- (74) a. ajá a ti Bùnmí  
 dog MTS of B.  
 ‘dog of Bunmi (as opposed to someone else’s dog)’

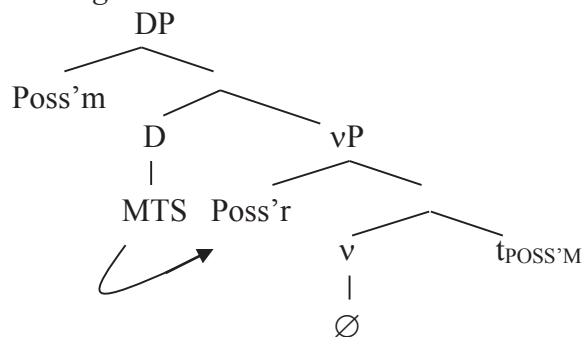
- b.      ilé      e      ti      Dàda  
          house MTS of      D.  
          ‘house of Dada’ (as opposed to someone else’s house)’

Having established the status of MTS and M-tone *ti* as functional heads (D & C respectively), in what follows, I discuss the function that they perform. I argue that these two elements are genitive Case assigners. In the next two subsections, I present two analyses of genitive Case assignment that is internal to genitive DPs, namely the raising analysis (Kayne 1994, Borsley 1997, 2004 and Bianchi 2000) and the traditional complementation analysis (Déchaine 2001).

#### 3.1.4.1 The co-argument analysis: Exceptional Case marking

I propose that the assignment of genitive Case to the possessor in Yorùbá involves a kind of Exceptional Case Marking (cf. Haegemann 1994, Lee 1995) where the MTS in D assigns Genitive case to the possessor argument in Spec vP, as in (75).

(75) *Exceptional Case marking*



This configuration is an instance of Exceptional Case Marking since it is exceptional for an argument to be assigned Case by an element outside of the projection that contains the argument (here vP).

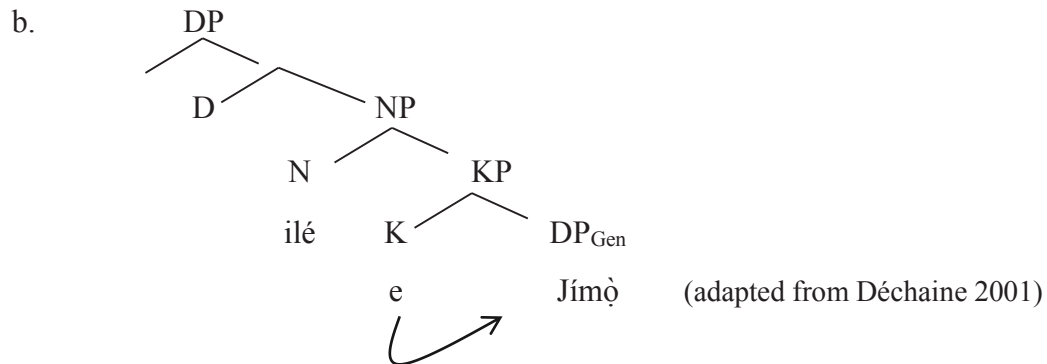
Observe that in (75) and elsewhere, within the genitive DP, the possessum NP must raise to either Spec CP or Spec DP. There is a question of what motivates raising of the possessum out of the complement position to Spec DP/CP. One reason for possessum raising is to receive non-genitive Case.

#### 3.1.4.2 The Head-Complement analysis: Case under government

In the complementation analysis, where the possessum is the head noun and the possessor is the complement, genitive case is locally assigned to the DP. In this instance, the genitive Case assigner is P or K(ase) (Déchaine 2001). This is what (76) illustrates.



- (76) a. ilé e Jímò  
house MTS J.  
'Jimo's house'



In the current analysis genitive Case is not assigned locally since D, which is the Case assigner occupies D and D in my proposal is introduced in the layer above the vP shell, the Spec of which the Possessor occupies.

### 3.1.5 Assigning structural case to the raised possessum

I address three things in the following subsections: the problem of raising in relation to Case assignment (§3.1.5.1); how the raised possessum is assigned the NOM Case if in the subject position, (§3.1.5.2); and ACC Case if in object position, (§3.1.5.3).

#### 3.1.5.1 The problem

The problem of Case assignment in the raising analysis is not peculiar to Yorùbá. Similar problems have been observed for English (Kayne 1994; Borsley 1997) and Polish (Borsley 1997). Let's consider the English example in (77), where 'picture' has raised from its object position to Spec CP.

- (77) a. [DP the [CP ↑ [IP Bill liked which picture]]]  
 b. [DP the [CP [DP which picture] [IP Bill liked t<sub>DP</sub>]]]  
 c. [DP the [NP picture] [CP [DP which t<sub>NP</sub>] [IP Bill liked]]]

The explanation offered by Kayne as to why the NP 'picture' raises is for the purpose of Case assignment. This is faulted by Morsley, who notes that the problem of raising has nothing to do with Case assignment. Borsley notes that *picture* has been assigned Case by *which* that occupies D position ever before it raises. Note that pronouns are regarded as D in Kayne's analysis. This is because, ever before

movement, *which* a D element, governs the NP: *picture*.

The other problem noted by Borsley is that while Kayne claims that the NP receives Case from a higher D, this same NP receives Case from its trace. This, according to Borsley, leads to Case conflict since this amounts to duplication of Case assignment.<sup>10</sup> What Borsley considers a problem is not so in the current analysis as such duplication will be regarded as an instance of Case stacking.

A similar problem arises for Polish, where an NP and its relative pronoun are assigned different Case because of movement of the NP. In (78), the NP *pana* ‘man’ receives Accusative Case while the relative pronoun *kióry* receives Nominative Case. The problem is why should the NP and the relative pronoun receive a different Case?

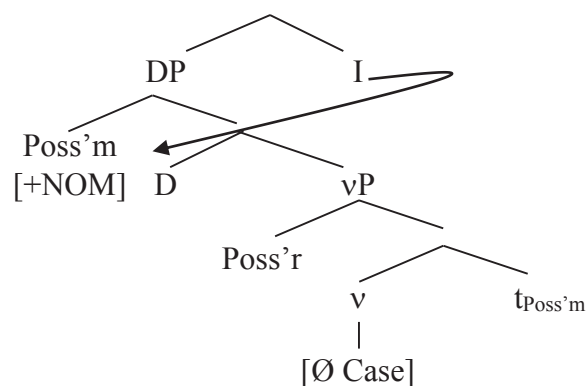
- (78) Widzialem tego **pana**, **kióry** zbil ci szybe7  
 saw-1SG the-ACC man-ACC who-NOM broke your-SG glass-ACC  
 ‘I saw the man who broke your glass.’ (Borsley 1997: 638).

Again, in the current proposal, Polish case is another instance of Case stacking. The following two subsections show how both nominative Case and accusative Case are assigned to nominals within genitive constructions in Yorùbá.

### 3.1.5.2 Assigning Structural case to the raised possessum I: Nominative

The problem I aim at addressing here is which of the two arguments within a given genitive DP receives which Case. I propose that when a DP is in the subject position, Nominative Case is assigned to the Possessum. On this view, Possessum raising is necessitated by the need to receive NOM Case.

- (79) *Assigning nominative Case to Genitive DP*



<sup>10</sup> Cf. free relatives in German (Wiltschko personal communication).

There is one instance of grammatical Case assignment in Yorùbá. In subject position the entire DP is qualified for nominative Case assignment. Observe that Nominative Case is assigned by the HTS in I(nfl). In (80), this Nominative case assigner shows up as a H-tone syllable, here ‘á’ (whose vocalic content is determined by assimilating the vocalic features of the immediately preceding vowel). Note the similarity between the MTS that assigns Gen Case and the HTS that assigns Nominative Case: they both take the segmental features of the preceding vowel. The difference lies in tone and the syntactic contexts that they can appear. MTS is found in nominal environments, whereas HTS is found in verbal environments.

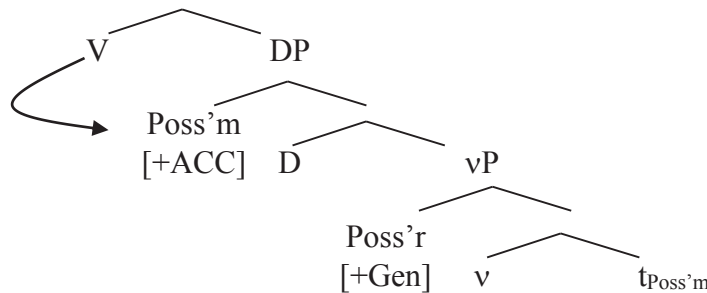
- (80) [Ilé e Gbàdà] á jóná  
 house MTS.Gen G. HTS.NOM burn  
 ‘Gbada’s house got burnt.’

The NOM Case assigned to possessums is another instance of Exceptional Case Marking. The same is true of assigning ACC Case to the possessum, which I consider next.

### 3.1.5.3 Assigning Structural case to the raised possessum II: Accusative

If in the object position, the entire DP is disposed to receive accusative Case. The ACC Case assigned to the possessum NP within the genitive DP is another instance of Exceptional Case Marking. I show this in (81), where even though the whole DP is assigned the ACC Case, the possessum is the recipient as shown by the arrow.

- (81) *Genitive DP in object position*



In (82) the L-tone verb *rà* ‘buy’ assigns Accusative Case to *òkò ọ Tàfá* ‘Tafa’s vehicle’. There is a syntactically conditioned phonological processes described as Yorùbá L-raising (Ajíbóyè et al 2004) which raises the L-tone of the verb to M.<sup>11</sup>

<sup>11</sup>This case has been analyzed as L tone drops in Déchaine (2001). According to that approach, this ‘L-drop’ is a kind of Accusative Case marking.

(82) *Accusative Case*

Jímò **ra** [òkò ɔ Tàfá]  
 J. buy+ACC yam MTS+Gen T.  
 ‘Jimo bought Tafa’s vehicle.’

This ends the discussion on the external Case assignment. I turn to Case assignment that is internal to the genitive construction.

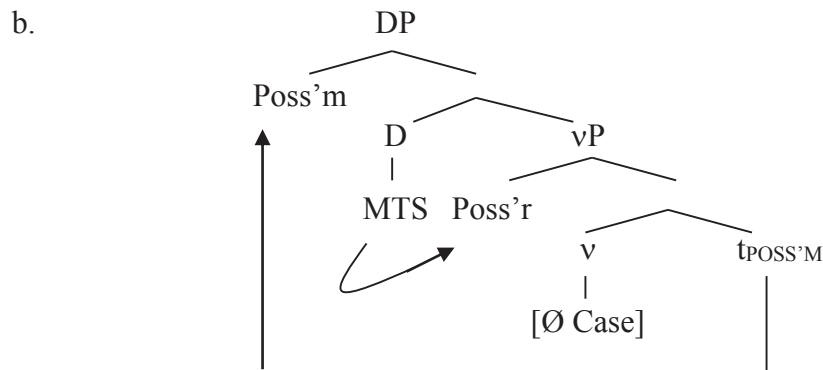
### 3.2 Genitive Case assignment and co-occurrence of the MTS with genitive *ti*

I have shown that it is possible for the MTS and *ti* to co-occur in a genitive DP in which case both D and C positions are pronounced. What I intend to discuss here is the function they perform when the MTS and *ti* occur separately as well as when they co-occur. I argue that each of them can assign Genitive Case.<sup>12</sup> When each of them independently assigns Genitive Case, this is an instance of Case alternation (§3.2.1). I also show that they can jointly assign Genitive Case, this is what I refer to as Case stacking (§3.2.2).

#### 3.2.1 Case alternation: Mid Tone Syllable or *ti*

The assignment of genitive Case can be carried out either by the MTS or the M-tone *ti*-element. The factor that determines which of them will assign Case depends on the landing site of the raised possessum. When the possessum NP raises to Spec DP, it is this MTS that assigns Genitive Case. This is illustrated in (83b) where the MTS assigns Genitive Case.

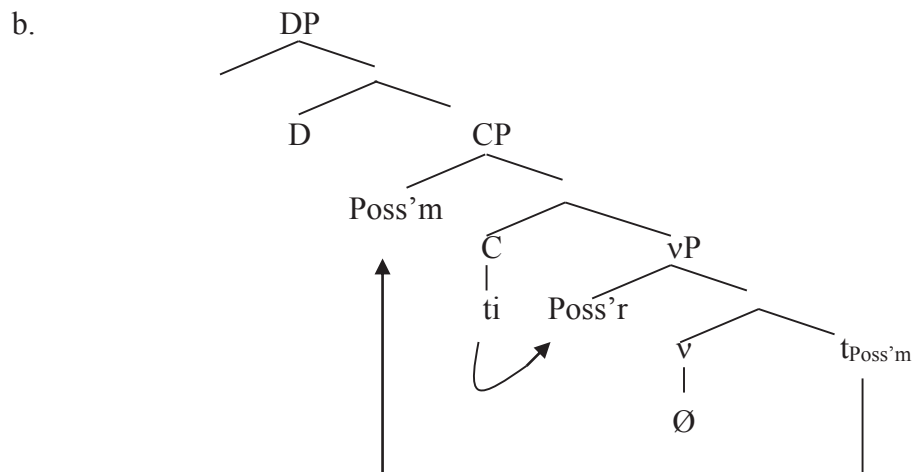
- (83) a. iwé e Kúnlé  
           book MTS K.  
           ‘Tunde’s book’



<sup>12</sup> There is an alternative analysis that will treat *ti* and MTS as inherently morphologized Case elements rather than Case assigners. Such alternative is not considered in this study.

The claim made for the MTS with respect to Case assignment is also applicable to *ti*, namely when it is the only functional element present in genitive phrase, it assigns Gen Case to the possessor. This implies that when the possessum raises to Spec CP, the *ti*-element, which occupies C is the only functional element that is available and as such, it assigns Gen Case to the possessor. This is what the structure in (84b) illustrates.<sup>13</sup>

- (84) a.      òbẹ    ti      Èbùn  
              knife C      E.  
              ‘knife of Ebun’



In summary, I have shown that each of the two functional heads can independently assign genitive Case to the possessor NP. The next thing I consider is how genitive Case is assigned when both elements co-occur.

### 3.2.2 Case stacking: Mid Tone Syllable and *ti*

We have seen that either the MTS or M-tone *ti* may intervene between the possessum and the possessor. In addition, it is possible for the MTS and *ti* to co-occur as in (85).

- (85) a.      Mo      rí      [ilé    e      ti      Túndé]  
              1sg    see    house MTS C      T.  
              ‘I saw the house of Tunde.’

<sup>13</sup> One consequence of this analysis is that we expect the H-tone *tí* to be able to assign Case in relative clauses. For example, in English, (i), *for* is assumed to be a complementizer which assigns Case.

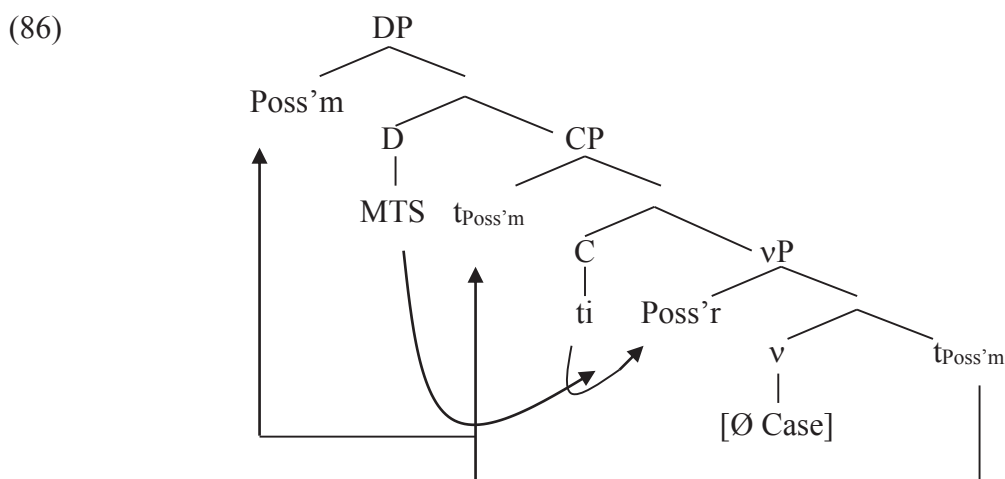
(i)      I want **for** Serena to leave.

This is going to be one focus for future research.

- b. [Ilé e ti Túndé] ga  
 house MTS C T. be-tall  
 'The house of Tunde is tall.'

I propose that the co-occurrence of these two functional heads (MTS as D, and *ti* as C) is an instance of Case stacking. I show that Yorùbá Case stacking has an interpretive effect and results in emphasis on the possessor.

First, I define Case assigner stacking in Yorùbá as the phenomenon whereby a DP is associated with two Case assigners. Rather than claiming that each argument is assigned genitive Case by each Case assigner, I propose that both the MTS and the *ti*-element multiply assign genitive Case to the possessor. See §3.2.3 below.



The Yorùbá type of Case stacking contrasts with the kind of Case stacking reported in the literature where one NP is assigned two different Cases. In Guugu Yalanji, it is possible for a Possessor to be assigned Genitive Case as well as Ergative Case, as in (87) where *ndamun* marks Genitive Case and *du* marks the Ergative Case on the noun *Dicki*.

- (87) Dicki-**ndamun-du** kaya-ngka  
 Dick-GEN-ERG dog-ERG  
 'Dick's dog' (Sadler and Nordlinger 2001: 4)

Similarly, in Korean, Case stacking involves co-occurrence of *eykey* and *-ka*, which assign Dative/Locative and Nominative Cases respectively to *Cheli*, as illustrated in (88).

- (88) Cheli- **eykey-ka** ton-i manh-ta  
 C- DAT-NOM money-NOM a.lot-DECL  
 ‘It is Cheli who has a lot of money.’ (Yoon 2004: 4)

The same phenomenon has been reported in many Australian languages with non-nominative subjects (Nordlinger 1998; Sadler and Nordlinger 2004) and in Korean (Yoon 2004) and references cited therein.<sup>14</sup> In the case of Yorùbá reported herein, there are two distinct elements that assign the Case.

There remains an unresolved problem with respect to the Case stacking analysis proposed for Yorùbá. This is in relation to the position of the MTS to the possessor. Recall that on independent grounds, I have shown that each of the MTS and M-tone *ti* assigns genitive Case to the Possessor under Exceptional Case Marking. The proposal that the MTS co-assigns genitive Case with M-tone *ti* is unusual since the MTS is not in the right configuration for Case assignment. The Exceptional Case Marking as it is discussed in the literature does not usually extend to cases where the Case assigner and the Case assignee are not in a local relation.

### 3.2.3 Interpretive effects of Case stacking

Yorùbá Genitive Case stacking has a semantic effect: a possessor that is multiply assigned Genitive Case has an emphatic interpretation. Following Bámgbóṣé (1966), an emphatic genitive DP involves laying emphasis on the possessor to make it prominent. This kind of genitive is marked by both the MTS and *ti*. To test this claim, consider the examples in (89) and (90). (90b) is more emphatic than (89b) as it indicates that the statue being referred to is only that of Awolowo.

- (89) a. Context: I went to Bodija and saw Awolowo’s statue. When I got back home, I say (89b) to my wife.
- b. Mo    rí    [èrè    **e**    Awólówò]    ní    Bódìjà  
 1sg    see    statue MTS    A.    Loc    B.  
 ‘I saw the statue of Awolowo at Bodija.’
- (90) a. Context: I was told that there are many statues of Nigeria leaders erected at different locations in Bodja but I only saw Awolowo’s. When my wife asked whose statue did I see, I replied with (91b).

<sup>14</sup>One characteristic feature of Case stacking is that it is sensitive to syntactic function (Sadler and Nordlinger 2004: 1). In Korean it is in non-nominative DPs, whereas in Yorùbá as reported herein, it is in genitive DPs.

- b. Mo      rí      [ère   **e**      **ti**      Awólówò]      ní      Bódijà  
 1sg      see      statue MTS      C      A.      Loc      B.  
 ‘I saw the statue of Awolowo at Bodija.’  
 (as opposed to say statue of Murtala Mohammed)

This emphatic force of multiply Case-marked genitives is further exemplified in (91), where there is a comparison between Kúnlé and Túndé’s statues. The presence of *ti* in *ère e ti Túndé* makes it more prominent and explains the reason why it is Ade’s preference.<sup>15</sup>

- (91) [Ère e      Kúnlé] dára sùgbón [ère e      **ti** Túndé] ni      Adé fẹ  
 statue MTS K.      nice but      status MTS of T.      FOC      A. want  
 ‘Kúnlé’s statue is fine but it is the statue of TUNDE that Ade wants.’

The claim being made for Yorùbá has support in the literature. In Korean, Yoon (2004:6) claims that Case stacking also gives rise to a focus-like interpretation in non-nominative subjects.<sup>16</sup> In (92), a Dative-marked nominal that is an underlying Object ‘advances’ to become a surface Subject which in turn means it can be marked with NOM Case. This leads Yoon to conclude that Cheli has a focus interpretation.

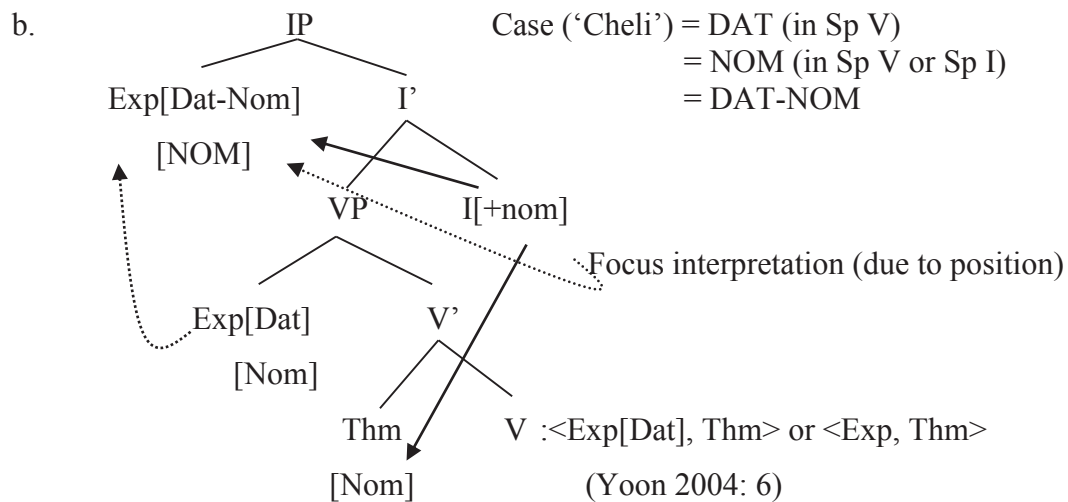
- (92) a. Cheli-eykey-ka      ton-i      manh-ta  
 Cheli-DAT-NOM      money-NOM      a.lot-DECL  
 ‘Cheli has a lot of money.’

<sup>15</sup> Recall that MTS is optional when the possessum is M-tone final.

- (i) a. ìgò      **o**      ti      Túndé      L      MTS  
 bottle MTS      C      T.  
 ‘the bottle of Tunde’  
 b. ère      (**e**)      ti      Túndé      M      (MTS)  
 statue MTS      C      T.  
 ‘the statue of Tunde’  
 c. owó      **o**      ti      Túndé      H      MTS  
 statue MTS      C      T.  
 ‘the money of Tunde’

<sup>16</sup> See Schütze (1996, 2001) for arguments against the view that Case Stacking involves focus.





Thus, the structural position of *Cheli* as a non-nominative subject earns it a focus interpretation.

Notice that the kind of Korean Case stacking is applicable to different Cases, whereas the one discussed for Yorùbá involves multiple assignment of the same Case by two different Case assigners.

Recall that when there is one Case assignment, there is one movement. This is witnessed if either the MTS (83), or M-tone *ti* (84) is the Case assigner; the Possessum moves once. However when there is Case stacking there is multiple movement of the Possessum, (86). In other words, Yorùbá Case-stacking is a diagnostic for multiple movement of NP. Similarly, in Korean, such multiple movement of NP has the same effect. Relating multiple movements to Case, the claim is that multiple movements of the Possessum induce a focus effect.

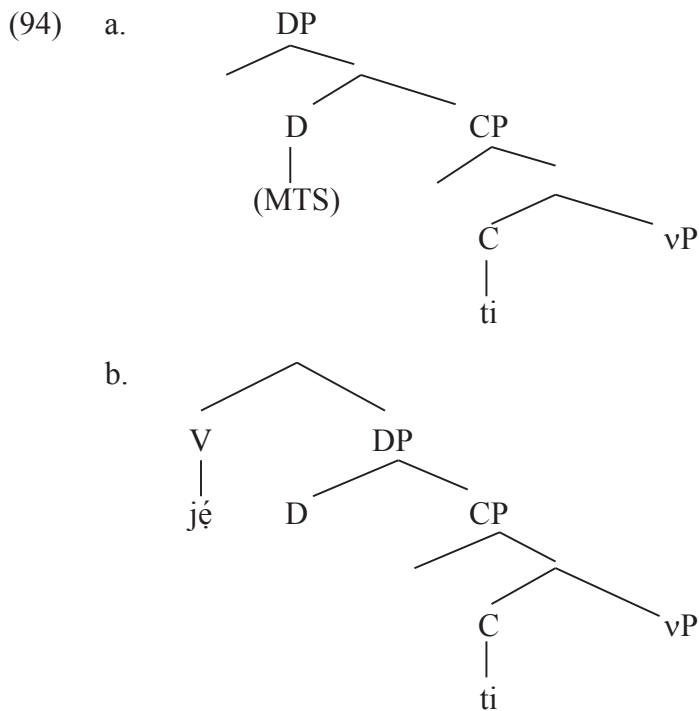
To conclude, I have shown that Case assignment can be carried out by the MTS or *ti*. I treat this as an instance of Case alternation. And when the two jointly assign genitive Case to the possessor, I call this an instance of Case stacking. In this latter case, in addition to being Case marked, the possessor is made prominent by way of emphasis.

### 3.3 The co-occurrence of the copula *jé* with genitive *ti*

I extend my analysis to yet another kind of construction where the *ti* element is found, namely in a verbal construction involving the verb *jé*. Some examples are given in (93).

- (93) a. Ilé yìi **jé** **ti** Kúnlé  
 house Dem is C K.  
 ‘This house is to Kúnlé = This house is Kunle’s.’
- b. Owó náà **jé** **ti** Bùnmi  
 money spf is C B.  
 = ‘That very money is to Bunmi.’  
 = ‘The very money is Bunmi’s.’
- c. Ilẹ̀ yẹn **jé** **ti** bàbá à mi  
 land Dem is C father MTS 1sg  
 ‘That land is to my father.’ = That land belongs to my father.’

Like the *ti*-construction, the *jé ti* construction involves a Possessum-Possessor co-argument relation. I propose that in both cases, *ti* heads a defective CP, as in (94).



The verb *jé* is also found in equative constructions where two nominals refer to the same person or object. In (95a), *àgbẹ̀* ‘farmer’ and *ọba* ‘king’ are equated with each other. Similarly, in (95b) *Bósẹ̀* and *ọmọ rere* ‘nice girl’ refer to the same person.<sup>17</sup>

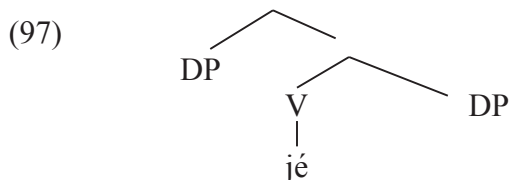
<sup>17</sup> cf. predicate inversion (Moro 1995)

- (95) a. Àgbẹ̀ **jẹ́** ọba *Subject Predicate*  
 farmer is king  
 ‘Farmers are king.’
- b. Bọ̀sẹ̀ **jẹ́** ọmọ rere  
 B. is child nice  
 ‘Bose is a nice girl.’

In addition to the *jẹ́* copula, Yorùbá has another copula, *ni*. The *jẹ́* copula contrasts with the *ni* copula in the following way: while (95) has a Subject-Predicate order (96) has a Predicate-Subject order. Thus, in (95a) with *jẹ́*, the first nominal, *àgbẹ̀* ‘farmer’ is the Subject, and the second nominal, *ọba* ‘king’ is the Predicate. However, in (96a), with *ni*, the first nominal, *ọba* ‘king’ is the Predicate, and the second nominal, *àgbẹ̀* ‘farmer’ is the Subject.<sup>18</sup>

- (96) a. Ọba ni àgbẹ̀ (jẹ́) *Predicate Subject*  
 king FOC farmer is  
 ‘Farmers are king.’
- b. Ọmọ rere ni Bọ̀sẹ̀ (jẹ́)  
 child nice FOC B. is  
 ‘Bose is a nice girl.’

This much establishes that *jẹ́* introduces two nominals, a Subject and a Predicate, as in (97).<sup>19</sup>



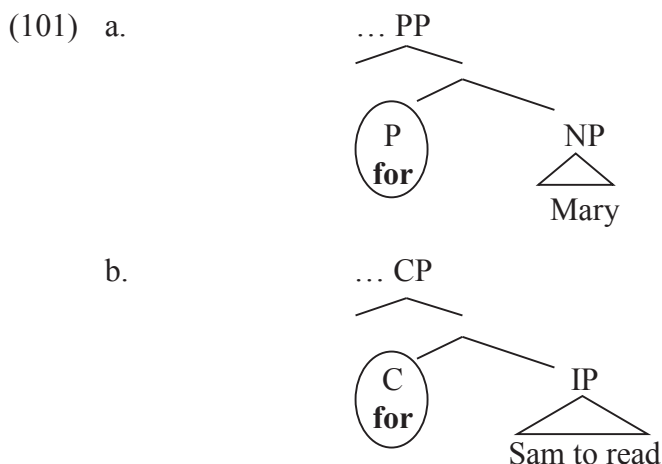
Now consider what happens when *jẹ́* combines with *ti*. On independent grounds, I have proposed that *ti* heads a reduced relative clause. Its appearance with equative *jẹ́* follows automatically: The *jẹ́* introduces a DP complement, which, as before, hosts a *ti*-clause. This is illustrated in (98).

<sup>18</sup> For discussion of the [Subject-Predicate] versus [Predicate-Subject] order, see Manfredi (1994).

<sup>19</sup> Note that only the possessum but not the possessor can move to Spec, IP in this type of construction.



The structure in (101a) illustrates the prepositional status of *for*. The structure in (101b) illustrates the complementizer status of *for*.



I analyze Yorùbá *ti* in the following sections as an element that functions as a preposition.

### 3.4.1 *láti* as a locative P at the right edge of vP

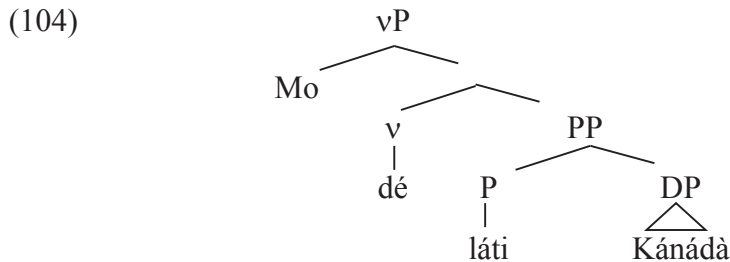
This section establishes that prepositional *ti* occurs in post-verbal PP in the form of *láti*<sup>20</sup> as illustrated in (102) and (103). The examples (102b-c) and (103b-c) show that *láti* cannot occur pre-verbally.

- (102) a. Mo dé [láti Kánádà] ní àárò  
 1sg arrive P Canada P morning  
 ‘I arrived from Canada in the morning.’
- b. \*Mo [láti Kánádà] dé ní àárò  
 1sg P Canada arrive P morning
- c. \*Mo ní àárò [láti Kánádà] dé  
 1sg P morning P Canada arrive
- (103) a. Mo fò láti Èkó ní àárò  
 1sg fly P Lagos P morning  
 ‘I airlifted from Lagos in the morning.’

<sup>20</sup> It appears *láti* is derived. It may be possible to decompose it to *ní* ‘locative’ and *àti* ‘and’ but there is no semantic relationship between these two components and the whole to support such a suggestion. As to this, I treat this element as a compound P.

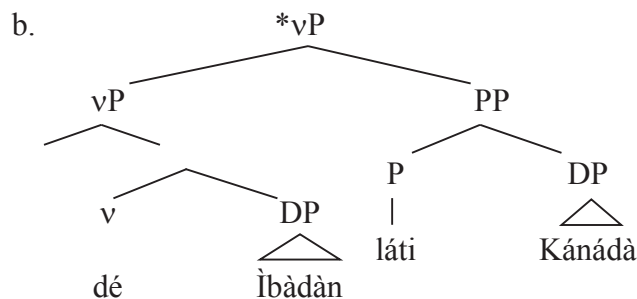
- b. \*Mo **láti** Èkó fò ní àárò  
 1sg P Lagos fly P morning
- c. \*Mo **láti** Èkó ní àárò fò  
 1sg P Lagos P morning fly

I propose that *láti* PPs are introduced as complement to *v*, as in (104).



The structure in (104) predicts that the PP cannot be an adjunct to *vP*. This is why (105a) is bad; as such, we cannot have the structure in (105b) where the PP is adjoined to the *vP*.

- (105) a. \*Mo dé Ìbàdàn láti Kánádà  
 1sg arrive I. from Canada



This section has established two points about *láti* phrase: it occurs post-verbally and it can only be a complement of *v*.

### 3.4.2 *ti* as a locative P at the left edge of the *vP*

As a preposition, *ti* also introduces expressions of location (Awóbùlúyì 1978:98). One other thing to add to this is the structural position of the *ti*-phrase relative to the verb: the PP that *ti* heads precedes the verb. This is shown by the (a) examples in

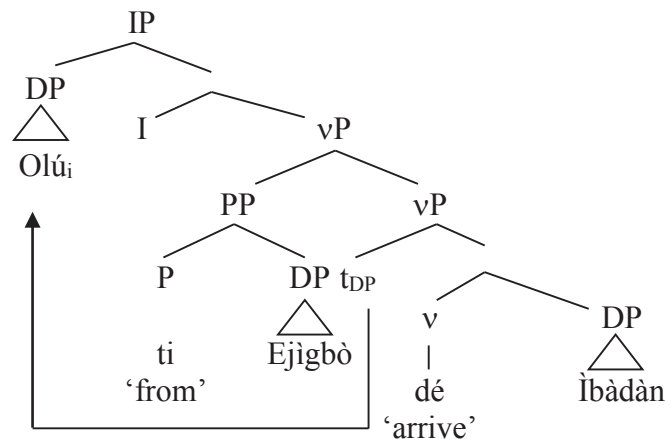
(106)-(109). In the (b) examples of (106)-(109), the *ti*-phrase immediately follows the verb, and in the (c) examples, the *ti*-phrase is sentence-final; the outputs are ungrammatical. This establishes that the PP headed by locative *ti* is pre-verbal and must also follow the subject DP.

- (106) a. Mo [ti ibè] dé ní àárò  
 1sg P place arrive P morning  
 'I got back from there in the morning.'
- b. \*Mo dé [ti ibè] ní àárò  
 1sg arrive P place P morning
- c. \*Mo dé ní àárò [ti ibè]  
 1sg arrive P morning P place
- (107) a. Ó [ti ilé] bèrè ìsekúṣe ní àárò  
 3sg P house start bad-behaviour P morning  
 'He began behaving badly from home in the morning.'
- b. \*Ó bèrè ìsekúṣe [ti ilé] ní àárò  
 3sg start bad-behaviour P house P morning
- c. \*Ó bèrè ìsekúṣe ní àárò [ti ilé]  
 3sg start bad-behaviour P morning P morning
- (108) a. Mo [ti Èkó] fò lọ sí Kánádà ní àárò  
 1sg P Lagos fly go P Canada P morning  
 'I took a morning flight from Lagos to Canada.'
- b. \*Mo fò lọ sí Kánádà [ti Èkó] ní àárò  
 1sg fly go P Canada P Lagos P morning
- c. \*Mo fò lọ sí Kánádà ní àárò [ti Èkó]  
 1sg fly go P Canada P morning P Lagos
- (109) a. Olú [ti Ejìgbò] dé Ìbàdàn ní àárò  
 O. P E. arrive I. P morning  
 'Olu arrived in Ibadan via Ejigbo in the morning.'
- b. \*Olú dé Ìbàdàn [ti Ejìgbò] ní àárò  
 O. arrive I. P E. P morning
- c. \*Olú dé Ìbàdàn ní àárò [ti Ejìgbò]  
 O. arrive I. P morning P E.

I propose that the preverbal *ti*-phrase is a left adjoined PP as in (110). There is one movement that is involved in the derivation, namely the subject DP moves from

Spec vP to Spec IP.

(110)



One important thing to note is the contrast between post-verbal *láti* whose PP is treated as a complement to *v* and the pre-verbal *ti* whose PP is analyzed as an adjunct.

### 3.4.3 *ti* as a marker of adjunct extraction

There is another kind of *ti* that I want to talk about. This is the one that is found at an adjunct extraction site. Cook (2004) claims that the *ti*-element found in WH constructions in Yorùbá is a mark of locative extraction and proposes that *ti* be treated as a locative head. The (a) examples in (111)-(112) show constructions that depict location of certain events. When a locative expression is questioned, a locative Wh-word appears in sentence-initial position, and locative *ti* appears in preverbal position, as in the (b) example of (111-112). The absence of *ti* in those contexts leads to ungrammaticality, as in the (c) examples of (111-112).

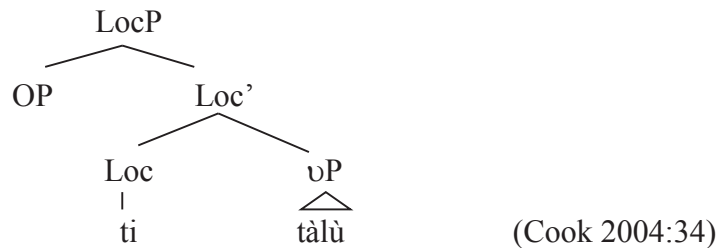
- (111) a. Adé jẹ òrò ní ojà  
 A. eat mango P market  
 'Ade ate mangoes at market.'
- b. Níbo ni Adé **ti** jòro \_\_\_\_  
 where FOC A Loc eat-mango  
 'Where did Ade eat mangoes?'
- c. \*Níbo ni Adé jòro \_\_\_\_
- (112) Adé ta ilù ní ojà  
 A. sell drum P market  
 'Ade sold drums at market.'



- b.      Níbo   ni      Adé   **ti**      tàlù   \_\_\_\_  
           where FOC   A      Loc   see-drum  
           ‘Where did Ade sell drums?’
- c.      \*Níbo   ni      Adé   tàlù   \_\_\_\_

Cook proposes a LocP for the *ti*-phrases found in WH-constructions where the Loc takes a  $\upsilon$ P as its complement, as in (113). She argues that the overt realization of this Loc is in complementary distribution with the OP in Spec LocP. Thus if the Spec pronounced Loc is null and vice versa.

(113) *Yorùbá locative P in Wh- extraction*



To recap, this section has examined the kind of *ti* that is found in locative expressions claiming that its presence is an indication that extraction has taken place.

### 3.5 Conclusion

This chapter has discussed two types of *ti*-constructions, namely the type found in genitives and the one found in non-nominal environments. I have established that *ti*-constructions in genitive environments are reduced relative clauses and the M-tone *ti*-element was analyzed as a C. I proposed that, as a functional element, *ti* assigns genitive Case to the possessor when it is the only Case assigner available, but when it co-occurs with the MTS they both co-assign genitive Case. I treated this as an instance of Case stacking. I also argued that *ti*-constructions in non-genitive environments are prepositional phrases, some of which are preverbal while others are post-verbal.



## Chapter 4

### Interpreting Yorùbá Bare Nouns

---

#### 4 Introduction

It is demonstrated in this chapter that Yorùbá lacks determiners (contra Bámgbóṣé 1967, 1990, 2001; Awóbùlúyì 1978), and so makes extensive use of bare nouns (BNs). These bare nouns<sup>21</sup> can be construed in at least one of these three ways<sup>22</sup>: generic (1a), indefinite (1b), or definite (1c).

- |     |    |                               |        |           |                                        |
|-----|----|-------------------------------|--------|-----------|----------------------------------------|
| (1) | a. | Òyìnbó                        | gbádùn | sìgá.     | <i>generic</i>                         |
|     |    | European                      | enjoy  | cigarette |                                        |
|     |    | ‘Europeans enjoy cigarettes.’ |        |           |                                        |
|     | b. | Mo                            | rí     | ajá.      | <i>indefinite</i>                      |
|     |    | 1sg                           | see    | dog       |                                        |
|     |    | ‘I saw a dog.’                |        |           |                                        |
|     | c. | Ajá                           | gbó    | mi.       | <i>definite</i> (in discourse context) |
|     |    | dog                           | bark   | 1sg       |                                        |
|     |    | ‘The dog barked at me.’       |        |           |                                        |

English does not permit the occurrence of bare nouns in the context of Yorùbá examples in (1). The parallel examples in (2) which are ungrammatical support this claim.

- |     |    |                            |
|-----|----|----------------------------|
| (2) | a. | *I saw <b>dog</b> .        |
|     | b. | * <b>Dog</b> barked at me. |

For the latter, nouns require overt determiners as shown in (3)<sup>23</sup>.

---

<sup>21</sup>The bare nouns discussed in this book focus mainly on count nouns partly because mass nouns are not clearly distinguished from count nouns in Yorùbá. See Chapter 6 for more discussion.

<sup>22</sup> It is worth noting one obvious distinction between an *indefinite* and a *definite* noun namely that when an indefinite reading is obtained there is usually a question like *which dog?* or *where?* In (1b) for instance, there may arise the need for either of the questions to be asked by the listener. By contrast, when a *definite* reading is obtained, it does not attract such questions. This is because in the latter case, there is usually a prior knowledge about the object that is being referred to.

<sup>23</sup> The example in (i) shows a context where English allows the absence of an overt determiner, namely with so-called ‘bare plural nouns’.

(i) Birds lay eggs.

- (3) a. I saw **a** dog.  
 b. **A** dog barked at me.

As discussed in the literature, Yorùbá is not the only language whose nouns lack overt determiners. The examples in (4) also show that Japanese nouns can be bare.<sup>24</sup>

- (4) a. John -ga **hon** -o yonda  
           -Nom book -Acc read  
       ‘John read a book.’  
 b. John -ga **ronbun**-o kai-ta  
           -Nom article wrote  
       ‘John wrote an article.’  
 c. **inu** -ga heya-ni haitte-kita  
    dog Nom room-to in came  
    ‘The dog entered the room.’ (adapted from Fukui 1995:105)

This chapter examines the distribution and interpretational variability of bare nouns in Yorùbá. There are four basic questions that I address. What are the determinants for interpreting Yorùbá bare nouns? (§4.1) What conditions the generic construal of bare nouns? (§4.2) What conditions the indefinite construal of Yorùbá bare nouns? (§4.3) What conditions the definite construal of Yorùbá bare nouns? (§4.4) The focus of §4.5 is the consequences of this analysis. §4.6 concludes.

#### 4.1 The determinants for interpreting Yorùbá bare nouns

Three factors determine how bare nouns are construed in Yorùbá: (i) the verb type; (ii) syntactic position; and (iii) discourse linking.

##### 4.1.1 Verb classes

The kind of verbs that a bare noun occurs with plays a crucial role in determining how these nouns are to be construed (Carlson 1977; Déchaine 1993; Chierchia 1995; Déprez 2004 among others). In this section, I examine three types of verbs in relation to the distribution and construal of Yorùbá bare nouns: (i) permanent states, (ii) temporary states, and (iii) dynamic events. I conclude that the construal of Yorùbá bare nouns is sensitive to these distinctions (cf. Déchaine 1993: 437).

<sup>24</sup> The suffix on bare nouns in Japanese is an instance of case marking.

#### 4.1.1.1 Permanent states (P-state)

Permanent states are verbs that express a permanent state of the individual. They do not denote actions that take place, as they involve no activity (van Voorst 1992:81). Permanent state verbs usually refer to a state or condition which is not changing or likely to change over time; they only have atemporal and abstract qualities (Bach 1981: 71; Carlson, 1979). They denote the kinds of states that people or things can be “in” for a long time. This can be a state of love, hate, wisdom, tallness etc. In fact, Dowty (1979: 126) claims that these verbs are somehow simpler or more limited in their interpretations than other kinds of verbs. If transitive, permanent state verbs encode a relation between an experiencer (subject) and the theme (object).

- (5) a. Mo fẹràn Títí *transitive P-state*  
 1sg love T.  
 ‘I love Titi.’
- b. Adé kórira mi  
 A. hate 1sg  
 ‘Ade hates me.’

If intransitive, permanent state verbs attribute a property to their subject:

- (6) a. Mo gò *intransitive P-state*  
 1sg be-stupid  
 ‘I am stupid.’
- b. Dúpẹ gbón  
 D. be-wise  
 ‘Dupe is wise.’
- c. Şehun ún ga  
 S. HTS be-tall  
 ‘Sehun is tall.’

#### 4.1.1.2 Temporary states (T-state)

I define temporary states as verbs that express behaviours or situations that last for a short time. These verbs are transitory since they express the state that does not last for a long time and they can be transitive, as in (7).

- (7) a. Títí bínú (bí inú) *transitive T-state*  
 T. be-annoy provoke stomach  
 ‘Titi was annoyed.’



In contrast, permanent-state verbs cannot take the progressive marker, (11).

- 
- (11) a. \*Mo    ñ    fẹ̀ràn    iṣu    \*S    ñ    P-state    O  
          1sg    prog    like    yam
- b. \*Mo    ñ    gò    \*S    ñ    P-state  
          1sg    prog    stupid

Another way by which event/temporary state and permanent-state verbs is that event/temporary-state verbs can either be construed as past or present perfect, (12).

- (12) Mo    jẹ    iṣu  
       1sg    eat    yam  
       (a) 'I ate yams.'                    *past*  
       (b) 'I have eaten yams.'           *present perfect*

When the example in (12) serves as an answer to the question in (13) then, the tense in relation to the time of utterance can be that of simple past or past perfect.

- (13) Ñjẹ    o    jẹ    iṣu  
       Q-tag 2sg    eat    yam  
       'Did you eat yam?'

In contrast, permanent-state verbs in Yorùbá usually convey a non-past meaning, (14).

- (14) a. Mo    fẹ̀ràn    ijó                    *non-past*  
          1sg    like    dance  
          'I like dancing.'
- b. Mo    gò                                *non-past*  
          1sg    stupid  
          'I am stupid.'

Lastly, the interpretation of bare nouns is sensitive to the permanent-state and event /temporary-state distinction. The contrast between the interpretation of *ológbò* as 'a cat' (15a), and 'cats in general' (15b), is attributable to the difference in the verb it combines with. The verb *pa* 'kill' in (15a) is eventive whereas *kórira* 'hate' in (15b) is stative.

- (15) a. Mo    **pa**    ológbò  
          1sg    kill    cat  
          'I killed a cat.'
- b. Mo    **kórira** ológbò  
          1sg    hate    cat  
          'I hate cats.'



This establishes that the construal of bare nouns is sensitive to the particular verbs they occur with. This is treated in greater detail in §4.2. I turn to another factor that is crucial to the construal of bare nouns, namely the syntactic position of bare nouns. The two positions controlled for are subject versus object.

#### 4.1.2 Subject versus object position

Another crucial factor in understanding how a given bare noun is to be construed is its syntactic position (cf. Rullmann 2003: 3). At first, it appears Yorùbá manifests an unrestricted distribution of bare nouns in argument positions in the sense that they can occur in subject as well as object position.<sup>25</sup>

- (16) a.      **Ajá**    rí        mi  
               dog    see     1sg  
               ‘A dog saw me.’  
       b.      Mo     rí        **ajá**  
               1sg    see     dog  
               ‘I saw a dog.’

Thus, there is sometimes a symmetrical relation between the subject and object in the sense that they can be interpreted the same way as shown in (16). In some other cases there is an asymmetrical relation. For example, while it is possible to interpret a bare noun as generic when in object position, such interpretation is not available if the same bare noun is in subject position as in (17). I discuss this in §4.2.

- (17) a.      **Ajá**    fẹ̀ràn    mi  
               dog    like    1sg  
               ≠‘Dogs like me.’  
       b.      Mo     fẹ̀ràn    **ajá**  
               1sg    like    dog  
               ‘I like dogs.’

#### 4.1.3 Discourse-linking

The term discourse-linking refers to a situation where the construal of a bare noun is supplied by the discourse. I define a discourse span as a group of sentences that focus on a topic (Wolfart 1972). Discourse-linked nominals are nouns that are either new or familiar referents in such a string of sentences. When a noun is mentioned at the beginning of a discourse, it is said to be a new referent. When it comes up in

<sup>25</sup>The fact reported here agrees with English but contrasts with Romance. In the latter, “bare nouns are confined to complement positions and excluded from pre-verbal subject positions” (Longobardi 2004:582).

subsequent discussion, it becomes a familiar referent.<sup>26</sup> The impact of discourse context on how Yorùbá bare nouns are to be construed is enormous. In Yorùbá, as I show later in the chapter, a bare noun can only be construed as definite in a proper discourse context. Since Yorùbá lacks overt determiners, it is not easy to identify discourse-linked utterances. In contrast, in English, which has overt determiners, the definite determiner links the noun it modifies to a noun that occurs earlier in the discourse, as illustrated in (18).<sup>27</sup>

- (18) a. Yesterday, **a snake** entered my room.  
 b. I was afraid to kill **the snake**.

In (18b), *the snake* is linked to *a snake* in (18a). The Yorùbá parallel example to (18) is given in (19). It is not possible to have a definite construal of *ejò* ‘snake’ in (19b) as we do in English examples in (18).

- (19) a. Ní àná **ejò** ó wọ inú ilé mi.  
 P yesterday **snake** HTS enter inside house 1sg  
 ‘Yesterday, a snake entered into my house.’  
 b. Èrù ú bà mi láti pa **ejò**  
 fear HTS catch 1sg to kill **snake**  
 #‘I was afraid to kill the snake.’

For reasons not quite understood, Yorùbá equivalent of (18) shown in (19) is odd. Pronoun is preferred instead, (20).

- (20) a. Ní àná **ejò** ó wọ inú ilé mi.  
 P yesterday **snake** HTS enter inside house 1sg  
 ‘Yesterday, a snake entered into my house.’  
 b. Èrù ú bà mi láti pa **á**  
 fear HTS catch 1sg to kill **it**  
 ‘I was afraid to kill it.’

As mentioned above, the reason for this is that Yorùbá lacks overt determiners like English ‘a/an’ and ‘the’ that can link the first and the second *ejò* ‘snake’ in (19).

<sup>26</sup>For details concerning discourse linking, see Stalnaker (1978); Pesetsky (1987); Enç (1991); Déchaine (1993); López (2000); Doherty (2005); Kiss (2005) among others.

<sup>27</sup> However, this is not always the case. For example in ‘The sun shines.’ or ‘The world is round’, the noun that is being modified by the determiner *the* is unique and cannot be linked to a noun that occurs earlier in the discourse.

This supports Kíss's (2005: 132) claim that discourse linking is much easier to obtain in a language with overt determiners.

The other alternative to the use of pronoun is to mark *ejò* 'snake' as salient by adding the salient marker *náà* to it, as in (21), otherwise a proper discourse context must be set.<sup>28</sup>

- (21) a.      Ní      àná      **ejò**      ó      wọ      inú      ilé      mi.  
                  P      yesterday      **snake**      HTS      enter      inside      house      1sg  
                  'Yesterday, a snake entered into my house.'
- b.      Èrù      ú      bà      mọ      láti      pa      **ejò**      **náà**  
                  fear      HTS      catch      1sg      to      kill      **snake**      **Sal**  
                  'I was afraid to kill **the very snake**.'

The account of how salience is marked in Yorùbá is given in Chapter 5.<sup>29</sup>

#### 4.2 What conditions the generic construal of bare nouns?

Following Chierchia (1995) and Greenberg (1998), I define generic sentences as those with bare nouns, which express "non-accidental, law-like generalizations". According to Carlson (1977, 1980) and Cohen (2004), the semantics of generic nouns show that they have a "quasi-universal flavor". As I show herein, Yorùbá generic bare nouns entail *kind referring expressions* (cf. Déchaine & Manfredi 1998; Chierchia 1995, 1998; Longobardi 2003 and Müller 2003: 72).

I propose that Yorùbá bare nouns can be construed as generic in one of two sets of contexts: in one set of contexts, a bare noun is construed as generic based on verb type.<sup>30</sup> This relates to the distinction between permanent-state and transitory (event/temporary-state). This is discussed as an instance of lexically conditioned genericity (§4.2.1). In the other set of contexts a bare noun can be generic in the presence of a characterizing (habitual) aspect (cf. Delfitto 2002; Longobardi 2002).

- <sup>69</sup>(i) a.      I told my friend that a snake and a spider entered my house yesterday. He asked me what I did to them and I said I killed the spider. He went further to ask of the snake then I said (i-b).
- b.      Èrù      ú      bà      mí      láti      pa      **ejò**  
                  fear      HTS      catch      1sg      to      kill      **snake**  
                  'I was afraid to kill **the snake**.'

See §4.4 for details on discourse linking.

<sup>29</sup> This is not to say that object nouns cannot be construed as definite without being marked for salience. As we shall see, definiteness of objects is obtained in contrastive construction or when the entity is physically present.

<sup>30</sup> Chierchia (1995) and Carlson and Pelletier (1995) claim that nouns occurring as subject of Individual Level Predicates (ILP) can be construed as generic in English.

I call this grammatically conditioned genericity, which in Yorùbá requires the presence of imperfective *máa-ń* (§4.2.2).

#### 4.2.1 P(ermanent)-states have a lexical GEN operator

Yorùbá bare nouns can be construed as generic if one of two conditions holds, as in (22).

- (22) Lexically conditioned GEN requires permanent-state verbs.  
Grammatically conditioned GEN requires imperfective *máa-ń*.

Lexically conditioned genericity is when the construal of a bare noun as generic is dependent on the verb type. A lexically conditioned generic construal does not require any special marking as genericity appears to be encoded in the verb (Chierchia 1995: 219). Descriptively, there are three contexts for the lexically conditioned generic construal of Yorùbá bare nouns:

- (23) *First generalization about genericity of Yorùbá bare nouns (lexically conditioned genericity):*

A Yorùbá bare noun can be construed as generic when it occurs as:

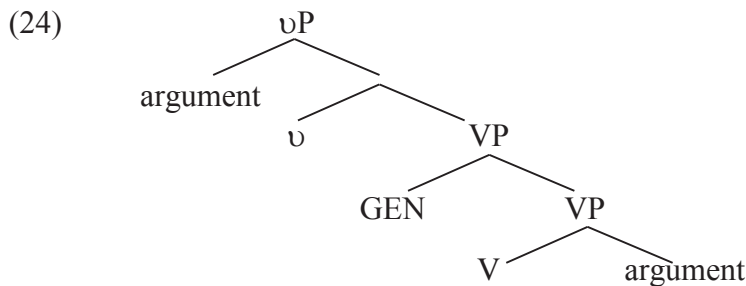
- (i) the object of a transitive permanent-state,
- (ii) the subject of an intransitive permanent-state or
- (iii) the subject of a transitive permanent-state verbs, but only if the object is also a bare noun.

In view of the above, I propose that lexically conditioned genericity is encoded in permanent-state verbs in Yorùbá and as such, in the appropriate syntactic position, a bare noun occurring with a permanent-state verb can be construed as generic. However, as observed by Chierchia (1995:202), the idea that certain verbs “are somehow inherently generic cannot be straightforwardly implemented in strict lexicalist terms. They need to be operated on by GEN”. Along this line, I further propose that Yorùbá permanent-state verbs are associated with a null generic operator (henceforth GEN) that binds any bare noun in its scope (Déchaine 1993: 495).<sup>31</sup> It is this GEN operator that licenses bare nouns as generic subject to certain other conditions that are discussed below. I adopt the structure in (24) following Chierchia (1995). Observe that GEN is base generated as an adjunct to VP.

<sup>31</sup> Déchaine (1993) claims that operators divide into two classes according to whether they take scope over a predicate or an argument. The relevant part of the construal condition is shown in (i).

(i) *construal condition*

For X to be construed with an operator, X must be in the domain of the operator.



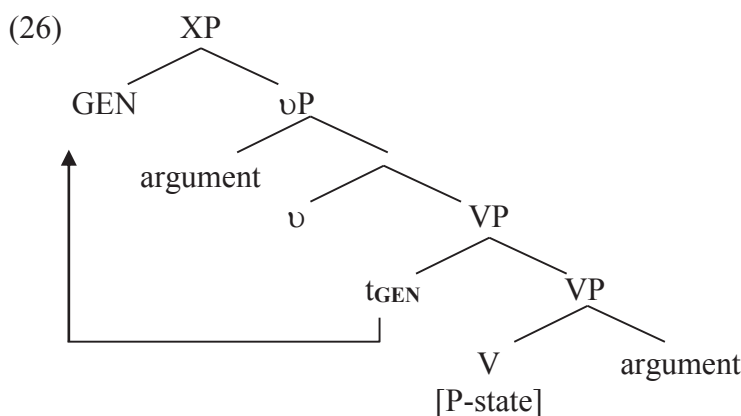
(adapted from Chierchia 1995: 213)

Given the proposal that GEN is adjoined to VP, it means that GEN can only scope over object bare nouns.<sup>32</sup> As we shall see, this has consequences for how subject BNs are to be construed as generic.

An operator scopes over an argument that it c-commands. In the case under discussion, only the object bare noun, and not the subject bare noun, is in c-command relation with GEN:

- (25) Absence of scope over subject of permanent-states
- a. If bare N is OBJ, then GEN
  - b. If bare N is SUBJ, then \*GEN

However, we shall see that the Yorùbá data show that it is sometimes possible for GEN to move to a position where it can scope over the subject BN. I propose that GEN in certain syntactic contexts, undergoes Q-raising from where it can scope over both subject and object BNs (cf. Diesing 1992; Szabolcsi 2000).



<sup>32</sup> The scope of an operator “is the domain within which it has the ability to affect the interpretation of other expressions.” (Szabolcsi 2000:607)

I split my discussion to three parts. In §4.2.1.1, I discuss genericity of object bare nouns of transitive permanent-states. In §4.2.1.2, I account for genericity of subject bare nouns of transitive permanent-states where I claim that for a subject bare noun of transitive permanent-states to be construed as generic, it must obey certain constraints. The focus of §4.2.1.3 is the account of genericity of subject bare nouns of intransitive permanent-states.

#### 4.2.1.1 Bare noun object of transitive P-states

When a bare noun functions as an object of a permanent-state verb, it can be construed as generic. (27a) describes a situation when I like dogs in general. Similarly, in (27b), it is the case that Moji hates cats in general.

- (27) a. Mo fẹ̀ràn **ajá** *object of P-state*  
           1sg like dog  
           ‘I like dogs.’  
       b. Mojí kórira **ológbò** *object of P-state*  
           M. hate cat  
           ‘Moji hates cats.’

By contrast, objects of permanent-state verbs are construed as indefinite when marked for specificity, as in (28), or as definite (in proper discourse contexts), as in (29b).

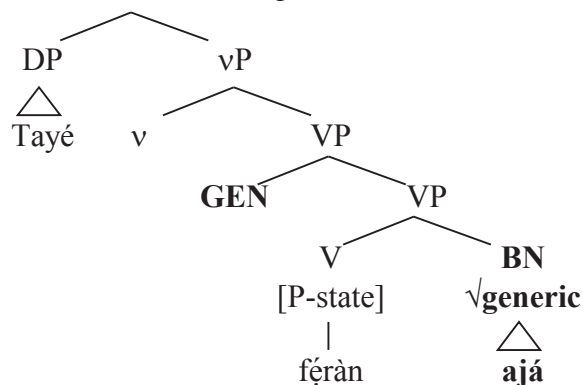
- (28) a. Mo fẹ̀ràn **ajá kan** *indefinite construal of object of P-state*  
           1sg like dog Spf  
           ‘I like a certain dog.’  
       b. Mojí kórira ológbò **kan**<sup>33</sup>  
           M. hate cat Spf  
           ‘Moji hates a particular cat.’  
       (29) a. Felicitous Context: My wife is shocked to hear that I like Tunde’s dog  
                   even though he is not friendly with us. When she asked if what she  
                   heard is true; I said (29b).  
           b. Òtító ni, mo fẹ̀ràn **ajá** *definite construal of object of P-state*  
               trute copula 1sg like dog  
               ‘It is true, I like the dog.’

Consequently, I propose that an object bare noun of a permanent-state verb is generic when it is in the domain of a lexical generic operator, which licenses it. This

<sup>33</sup> See Chapter 5 for an account of how *kan* marks indefinite nouns as specific.

is illustrated in (30). By hypothesis, permanent-state verbs are associated with a GEN OP in the lower VP; this GEN OP c-commands the object position.

(30) *Lexical GEN with permanent-state verbs: BN in O position*



This much establishes the claim that when a bare noun functions as an object of a permanent state verb, it can be construed as generic.

#### 4.2.1.2 Bare noun subject of transitive P-states

The focus of this section is what conditions the construal of subject bare nouns as generic. First, consider the examples in (31). *ajá* ‘dog’ (31a) and *ológbò* ‘cat’ (31b) are construed as generic in the sense that it is the case that the former, i.e., *ajá* ‘dogs’ generally like bones and the latter, i.e., *ológbò* ‘cat’ generally hate *àkàrà* ‘bean-cake’.

- (31) a. **Ajá** fẹràn egungun *subject of transitive P-state (I)*  
 dog like bone  
 ‘Dogs like bones.’
- b. **Ológbò** kórirà àkàrà  
 Cats hate bean-cake  
 ‘Cats hate bean-cakes.’

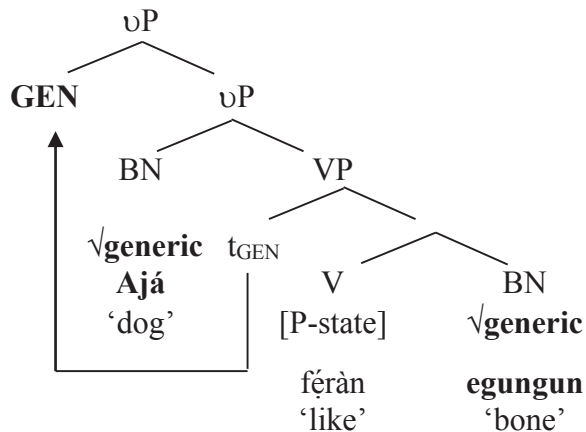
In contrast to the examples in (31) are those in (32) where the same bare nouns occurring as subject of the same permanent-state verbs cannot be construed as generic.<sup>34</sup> The example in (32a) cannot mean that it is generally the case that dogs like me. Similarly, in (32b) too, it is not generally the case that cats hate Moji.

<sup>34</sup> Note also that an indefinite construal of these bare nouns requires the presence of the specificity marker while their construal as definite requires a proper discourse context.

- (32) a. **Ajá** fẹràn Táyé *subject of transitive P-state (2)*  
 dog like T.  
 \*‘Dogs like Taye.’
- b. **Ológbò** kórirá Mojí  
 cat hate M.  
 \*‘Cats hate Moji.’

This raises the question of what brings about this distinction. I first account for the case where both the subject and object are bare nouns. Here we observe object dependency, i.e., the genericity of the subject depends on the genericity of the object. In the two examples in (31), both subject and object are bare nouns. It follows that like object bare nouns, it appears that a subject bare noun can also be generic. Based on this fact, I propose the structure in (33), where GEN moves to a position where it can scope over both the subject and the object bare nouns.

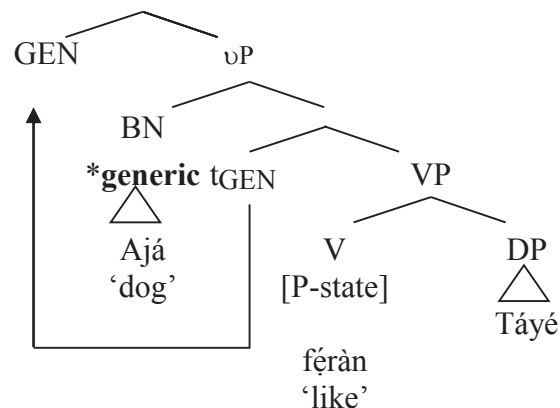
- (33) *Lexical GEN with permanent-state verbs: BN in S & O position*



As the structure in (33) shows, two crucial conditions are needed for subject bare nouns to be construed as generic. First, the object must be a bare noun. Second, there is abstract movement of GEN from its adjoined VP position to a position where it can scope over the subject.

We are left with the account of the examples in (32) where subject bare nouns occur with transitive permanent-state verbs whose objects are not bare (i.e., *Taye*, a 1sg object pronoun (32a) and *Moji*, a personal name, (32b)). I illustrate this in (34). Observe that abstract movement of GEN to a position where it could c-command the subject bare noun should make a generic construal possible, yet this is precisely the interpretation that is unavailable.



(34) *Non-genericity with permanent-state verbs: BN in S position*

The question that this analysis raises is why is it not possible for any subject bare noun of a permanent state verb to be construed as generic? The genericity of a subject bare noun seems to depend on the genericity of an object noun. This means in order for a subject bare noun of a P-state to be construed as generic, the object must also be bare; this is an instance of object dependency. Even when GEN raises to a position where it can scope over the bare noun subject, it is still not possible for the bare noun to be construed as generic. This establishes another point namely, though the issue of scope is very crucial, it is not the only determining factor. As we shall see, for examples such as (32), a generic construal is possible only if imperfective *máa-n* is present (see §4.2.3).

I conclude that genericity is made available to bare nouns in both subject and object positions but with a constraint on those in subject position. Thus, generic construal of Yorùbá bare nouns is both structurally constrained and lexically determined.

#### 4.2.1.3 Bare noun subject of intransitive Permanent-states

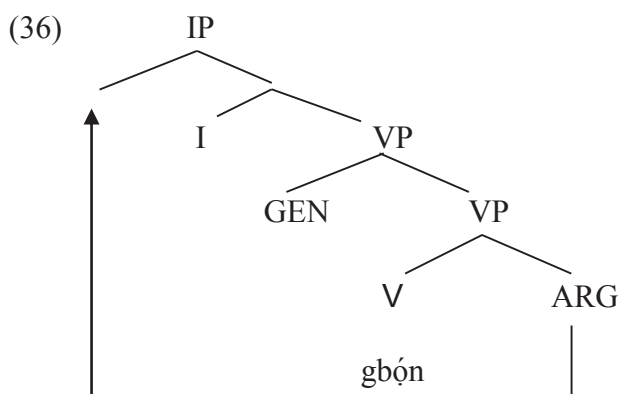
A bare noun of an intransitive permanent-state is construed as generic. In (35a), it is the case that elephants are generally considered big animals.<sup>35</sup> Similarly, tortoises are generally considered wise, (35b).

<sup>35</sup> In Yorùbá mythology, elephants are held in high esteem. They are described as splendid such as contained in this *oríkì* 'praise song'.

- (i) a. Kíkú erin a dà bí ilé o  
 GER-die elephant it be like house emph  
 'When an elephant lies down dead it has the size of a house.'
- b. À-i-kú erin a dà bí òkè o...  
 Nom-Neg-die elephant it be like mountain emph  
 'When an elephant is alive, it has the size of a mountain.'

- (35) a. **Erin**                      tóbi                      *subject of intransitive P-state*  
          elephant                be-big  
          ‘Elephants are big.’
- b. **Ìjàpá**                      gbón                      *subject of intransitive P-state*  
          tortoise                   be-wise  
          ‘Tortoises are wise.’

The question is how do we account for the genericity of a subject bare noun of an intransitive permanent-state? The account is as follows. I propose that intransitive permanent-states are unaccusative (Chomsky 1991; Lasnik 2000; MacDonald 2004). As such, the internal argument receives its generic construal in the (underlying) object position and raises to the (surface) subject position for Case. This claim is in line with the observation that objects of permanent-states can be generic. In the current analysis, the only way to explain why a subject bare noun of an intransitive permanent-state is generic is to assume that it starts out as an internal argument, as in (36).



This implies that intransitive P-state verbs are unaccusative and that their object must raise in the overt syntax to receive Case.<sup>36</sup> I define an accusative predicate as a verb which allows a post-verbal subject (cf. Radford 1997:533). This subject occupies the object position at LF before it raises to the subject position at S-syntax.

#### 4.2.2 T(emporary)-states require a grammatical GEN operator

This section accounts for the grammatically conditioned generic construal of bare nouns. I claim that this occurs with transitory verbs (temporary-states and events). I start my discussion with the second generalization about genericity of Yorùbá bare

<sup>36</sup>Note that the corresponding permanent state predicates in Italian are not unaccusative (Cinque 1990). However, the sentences corresponding to (35) are also bad in Italian with bare nouns. For details see the cited work.

nouns:

- (37) *Second generalization of genericity of Yorùbá BNs  
(grammatically conditioned genericity)*

A Yorùbá BN can be construed as generic if:  
it is an argument of a T(emporary)-state verb marked by imperfective  
*máa-n*<sup>37</sup>

The discussion here focuses on three different contexts where bare nouns can occur with temporary-states. In §4.2.2.1, I discuss the genericity of bare noun objects of transitive T-states. In §4.2.2.2, I discuss the genericity of bare noun subjects of transitive T-states. Finally, in §4.2.2.3, I discuss the genericity of bare noun subjects of intransitive T-states.

#### 4.2.2.1 Bare noun object of transitive T-state

Observe that Yorùbá transitive temporary-state verbs translate into English as intransitive adjectives, which are accompanied by copula verbs. The example in (38a) is an occurrence of *ajá* ‘dog’ in object position without the imperfective and it can only be interpreted as indefinite. However, with the presence of imperfective *máa-n* in (38b), the interpretation of *ajá* ‘dog’ is generic, thus it is the case that in circumstances, dogs are always hungry.

- (38) a. Ebí pa **ajá** sùn *object of transitive T-state*  
hunger-HTS seizes dog sleep  
‘A dog slept without food.’

<sup>37</sup> Barczak (2004) treats *máa-n* as grammatical particles that can jointly mark a habitual sentence. In this analysis, I treat them as imperfective. There remains the question of whether compositionality plays any role in the fusion of the two particles for the purpose of marking the imperfective. The specific questions that one may ask are the following: (a) how is a bare noun interpreted when each of the particles occurs by itself? (b) Does [*máa-n*] ever occur in a sentence, which is imperfective without being habitual or vice versa? To answer the first question, consider the following sentences.

- (i) a. Ajá *máa* rí mi. ‘A dog will see me.’  
b. Ajá *n* rí mi. ‘A dog is seeing me/Dogs see me.’  
c. Ajá *máa* fẹ̀ràn mi. ‘A dog will like me.’  
d. Ajá *n* fẹ̀ràn mi. ‘\*A dog is liking me/#Dogs like me.’

The examples in (i- a & c) show that when *máa* occurs by itself, a bare noun can only be interpreted as indefinite and the sentence can only reflect future tense. On the other hand, when *n* occurs by itself, the interpretation of a bare noun depends on the kind of verb. With an event verb, a bare noun can be interpreted as indefinite when the action is progressive or generic. But with a state verb (i- d), the indefinite reading is not obtained because the sentence cannot be interpreted as progressive. Similarly, it is not felicitous to interpret the bare noun as generic. As shown in all the examples so far, we do not have the problem of interpretation of bare nouns as generic with the combination of the two particles. This explains why I decide to treat *máa-n* as imperfective in this book.

- b. Ebí máa-ń pa **ajá** sùn  
 hunger-IMP seizes dog sleep  
 ‘Dogs go to sleep without food.’

#### 4.2.2.2 Bare noun subject of transitive Temporary-state

The discussion in this section is about the occurrence of bare noun subjects of transitive T-state verbs. Again, such bare nouns continue to be non-generic without the presence of imperfective *máa-ń*. This is shown by the contrast between (39a), where imperfective is absent and (39b) where it is present. Only in the latter is the generic construal possible.

- (39) a. **Ajá** pa ebi sùn *subject of transitive T-state*  
 dog seizes hunger sleep  
 ‘A dog slept without food.’
- b. **Ajá** máa-ń pa ebi sùn  
 dog IMP seizes hunger sleep  
 ‘Dogs sleep without food.’

Similarly, when the bare noun *èkúté* ‘mouse’ occurs with the existential verb *wà* ‘be’ in (40), it only shows a temporary presence of *èkúté* ‘mouse’ in that particular location, and not that mice are always in the house. Again, only when imperfective *máa-ń* appears as in (40b), is the genericity of this bare noun is obtained.

- (40) a. **Èkúté** wà nínú ilé *subject of transitive T-state*  
 mouse be inside house  
 (i) ≠ ‘Mice are in the house.’ (\*generic)  
 (ii) = ‘There is a mouse in the house/There are mice in the house.’
- b. **Èkúté** máa-ń wà nínú ilé  
 mouse IMP be inside house  
 ‘Mice are found in the house.’

#### 4.2.2.3 On the absence of intransitive T-state in Yorùbá

This section shows that there are no intransitive temporary state verbs in Yorùbá. This is a lexical gap when Yorùbá is compared to other languages. In order to establish this claim I compare Yorùbá with English. The examples in (41) are all adjectival intransitive verbs. As such, they do not take object nouns.

- (41) a. John is tired.  
 b. John is angry.  
 c. John is happy.  
 d. John is sad.

However, the Yorùbá parallel examples in (42) show that these verbs are transitive and therefore require object nouns.<sup>38</sup> Also worthy of note is the fact that the subject can be an expletive pronoun as in (42a).

- (42). a.      Ó      rê      Túndé  
                  it      sick      T.  
                  ‘Tunde is tired.’
- b.      Túndé bí                      inú  
                  T.      provoke      stomach  
                  ‘Tunde was angry.’
- c.      Túndé ní      ayò  
                  T.      have      joy  
                  ‘Tunde is happy.’
- d.      Túndé ba      inú      jẹ<sup>39</sup>  
                  T.      spoil      stomach  
                  ‘Tunde is sad.’

In conclusion, the data presented in §4.2.2.1-§4.2.2.3 establish the point that all temporary-state verbs in Yorùbá are transitive. I now turn to a presentation of cases relating to event verbs.

#### 4.2.3 Events require a grammatical GEN operator

I will show here that like temporary-states, event verbs also require a grammatical GEN operator in order for bare noun to be construed as generic. This leads us to the third generalization of genericity:

- (43) *Third generalization of genericity of Yorùbá BNs*  
       *(grammatically conditioned genericity)*

A Yorùbá BN can be construed as generic if:

it is an argument of an event verb marked by imperfective *mǎa-æ*;

The following three subsections look at three different contexts where bare nouns can occur with eventive verbs. §4.2.2.1 discusses the genericity of bare noun objects of transitive events. §4.2.3.2 discusses the genericity of bare noun subjects of

<sup>38</sup> In most cases, the object forms part of their meaning.

<sup>39</sup> The verb *bàjẹ* ‘spoil’ is one of the splitting verbs whose object occurs in between them (Awóbùlúyì 1978).

transitive events. Finally, in §4.2.2.3, I discuss the genericity of bare noun subjects of intransitive events.

#### 4.2.3.1 Bare noun object of transitive event

When a bare noun occurs as the object of a transitive event verb, it cannot be construed as generic except if imperfective *máa-ń* is present. In (44a) where *egungun* ‘bone’ is an object, it is not the case that generally, I eat bones. Once imperfective *máa-ń* is introduced in (44b), this bare noun is interpretable as generic: each time I eat, I eat bones.

- (44) a.      Mo      jẹ      **egungun**      *object of transitive event*  
              1sg    eat    bone  
              (i)    ≠‘I ate bones.’  
              (ii)   =‘I ate a bone.’
- b.      Mo      *máa-ń* jẹ      **egungun**  
              1sg    IMP    eat    bone  
              ‘I eat bones.’

#### 4.2.3.2 Bare noun subject of transitive event

The same can be said of bare noun subjects of transitive events. (45a) shows *ajá* ‘dog’ as the subject of the verb *rí* ‘see’; it is construed as indefinite. On the other hand, in (45b), where imperfective *máa-ń* is introduced, it can be that each time I jump over the fence of a building a dog will see me.

- (45) a.      **Ajá**      rí      mi      *subject of transitive event*  
              dog    see    1sg  
              (i)    ≠‘Dogs see me.’  
              (ii)   =‘A dog saw me.’
- b.      **Ajá**      *máa-ń*      rí      mi  
              dog    IMP      see    1sg  
              ‘Dogs see me.’

Lastly, in (46), we see *ajá* ‘dog’ and *egungun* ‘bone’ as subject and object of *rí* ‘see’ respectively. None of them has a generic construal. With the introduction of imperfective *máa-ń*, as in (46b), a generic construal of these bare nouns is obtained. Thus, in (46b) dogs in general eat any kind of bone.

- 
- (46) a. **Ajá** jẹ **egungun** *subject & object of event*  
           dog eat bone  
           (i) ≠ ‘Dogs eat bones.’  
           (ii) = ‘A dog ate a bone.’
- b. **Ajá** máa-ń jẹ **egungun**  
      dog IMP eat bone  
      ‘Dogs eat bones.’

#### 4.2.3.3 Bare noun subject of intransitive events

This section briefly examines cases relating to the occurrence of bare noun subjects of intransitive event verbs and establishes that like other transitory verbs, these verbs require the presence of imperfective *máa-ń* before such bare nouns can be construed as generic. The example in (47a) contrasts with (47b) in one respect, namely, the absence of imperfective in (47a) and its presence in (47b). This contrast in turn brings about a difference in interpretation. Thus, (47a) can only mean that there is a dog that is asleep whereas (47b) indicates that it is the case that dogs sleep under certain conditions.

- (47) a. **Ajá** sùn *subject of intransitive event*  
           dog sleep  
           ‘A dog is asleep.’
- b. **Ajá** máa-ń sùn  
      dog IMP sleep  
      ‘Dogs sleep.’

In summary, I have examined different contexts where grammatically conditioned genericity is realized. Contrasts are made between contexts that permit generic construal with those that do not. The conclusion that I reach is that genericity of bare nouns in all of these contexts is possible with T-states and events only if imperfective *máa-ń* is introduced. What remains to be resolved is how to capture this generalization. Based on this, I propose that this imperfective marker carries a quantificational feature that forces the presence of GEN in its local environment, as suggested by Chierchia (1995:202).

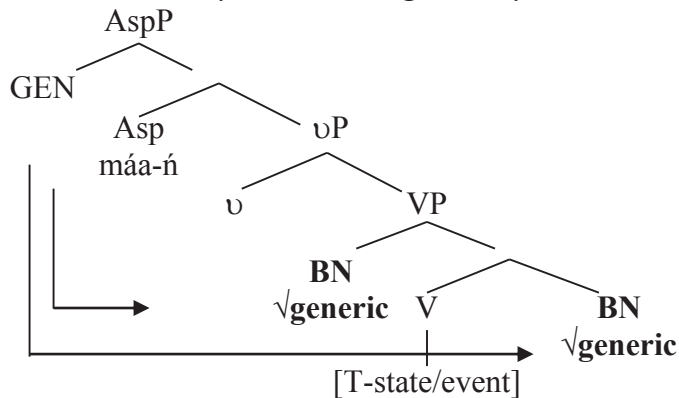
#### 4.2.4 Analysis of grammatically conditioned genericity

The analysis of grammatically conditioned genericity of bare nouns that I propose draws largely from the work of Kamp and Reyle (1993: 569); Chierchia (1995) and Kiss (1998). In their aspectual operator-based analysis, Kamp and Reyle treat “progressive” and “perfect” as aspectual operators (Asp OP). According to them, these operators transform the meaning of the underlying non-progressive or non-

perfect verb, verb phrase or sentence into that of its progressive or perfect counterpart respectively.

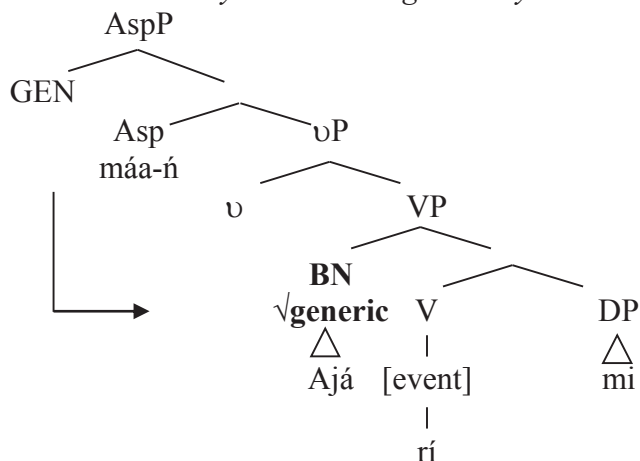
Adapting their operator-based analysis, I propose that imperfective *máa-n* is associated with a vP-external aspectual operator, as in (48). This makes available the generic construal of bare nouns in either subject or object position.

(48) *Grammatically conditioned genericity with T-state/event*



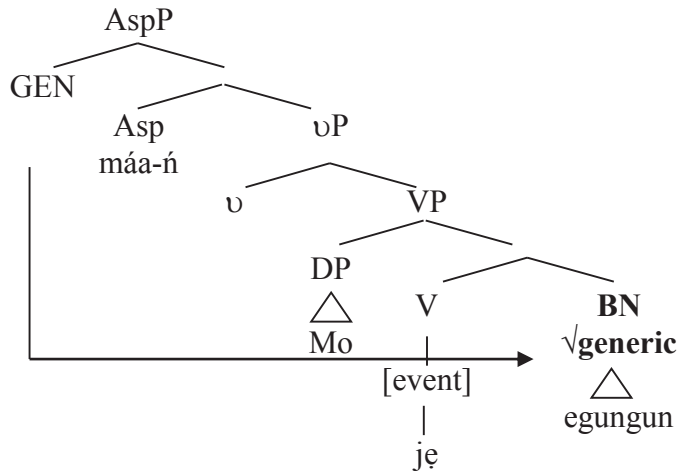
Specifically, I propose that imperfective *máa-n* is associated with a GEN operator, which is introduced in Spec AspP. The location of the imperfective above VP is supported by the fact that in Yorùbá, the position of Aux is higher than VP (Déchaine 1993; Oyèláràn 1989; Barczak 2004). The structures in (49-51), which are representative samples of the data presented above, illustrate how the combination of imperfective marker with GEN derives the generic construals of bare nouns in all argument positions with event verbs.

(49) *Grammatically conditioned genericity with events: BN in S position*

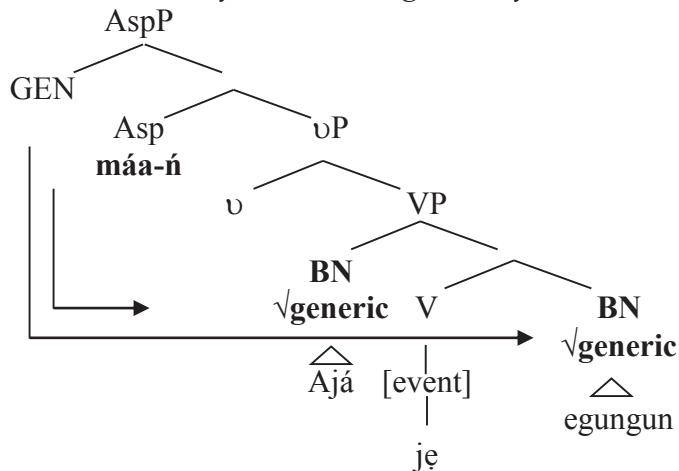




- (50) *Grammatically conditioned genericity with events: BN in O position*

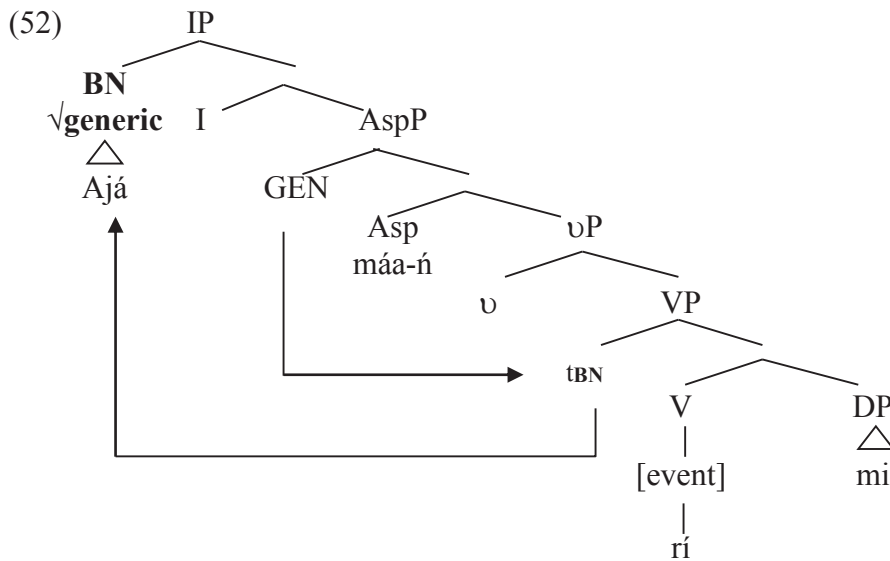


- (51) *Grammatically conditioned genericity with events: BN in S & O*



The introduction of the imperfective aspectual marker *máa-ń* in conjunction with the GEN operator accounts for the generic construal of bare nouns with transitory verb constructions. I extend this analysis to cases involving permanent state verbs.

Finally, note that in the surface syntax, the subject NP precedes the imperfective. Once the subject bare noun receives its generic reading, it moves to Spec IP where it receives nominative case from I(nfl).



#### 4.2.5 Extending grammatically conditioned genericity to Permanent State verbs

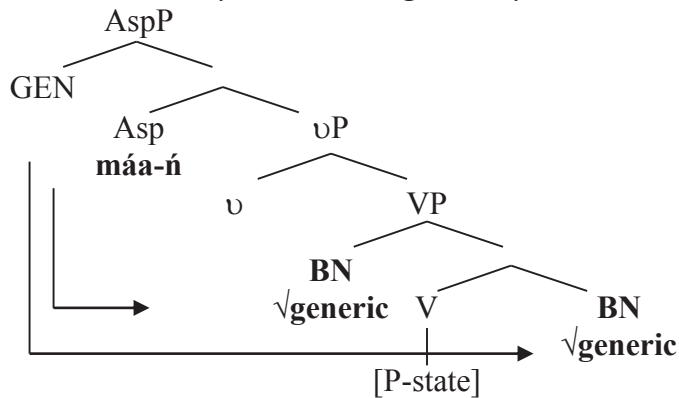
Recall that a bare noun cannot be construed as generic when it occurs as the subject of a transitive permanent-state verb whose object is not bare. Here, the presence of imperfective *máa-n* is required for a generic construal. In (53a), it is the case that generally anywhere I go, and dogs see me, they always play with me. In (54a), it is the case that for certain behaviour of Ade, generally, teachers hate him. In the (b) examples in (53)-(54) where the imperfective marker is absent, a generic construal is not possible.

- (53) a. **Ajá** **máa-n** fẹ̀ràn mi  
 dog IMP like me  
 'Dogs like me.'
- b. **Ajá** fẹ̀ràn mi  
 dog like 1sg  
 (i) ≠ 'Dogs like me.'  
 (ii) = 'A dog likes me.'
- (54) a. **Olùkó** máa-n kórirá Adé  
 teacher IMP hate A.  
 'Teachers hate Ade.'

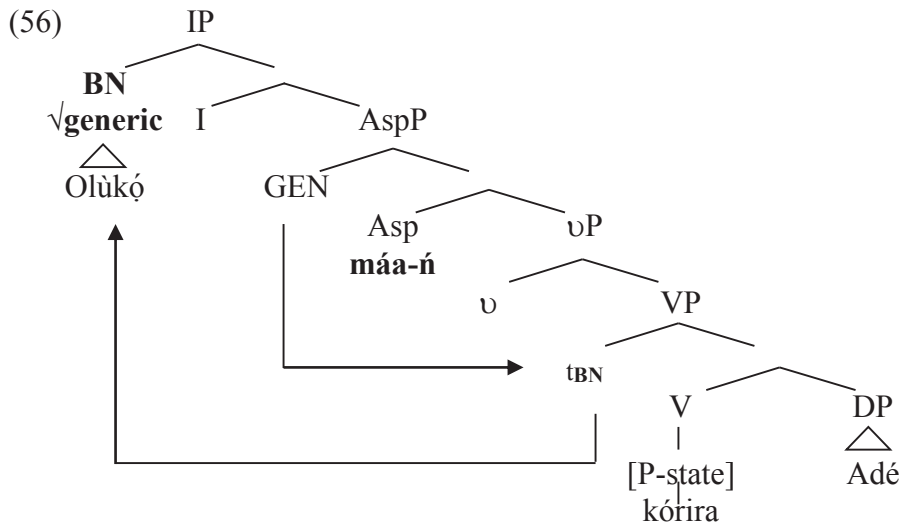
- b. **Olùkó** kóira Adé  
 teacher hate A.  
 (i) ≠ ‘Teachers hate Ade.’  
 (ii) = ‘A teacher hates Ade.’

The structure in (55) represents all the cases discussed above since there is no constraint other than the presence of imperfective marker and the positioning of GEN in a place where it can scope over these bare nouns.

(55) *Grammatically conditioned genericity with P-state*



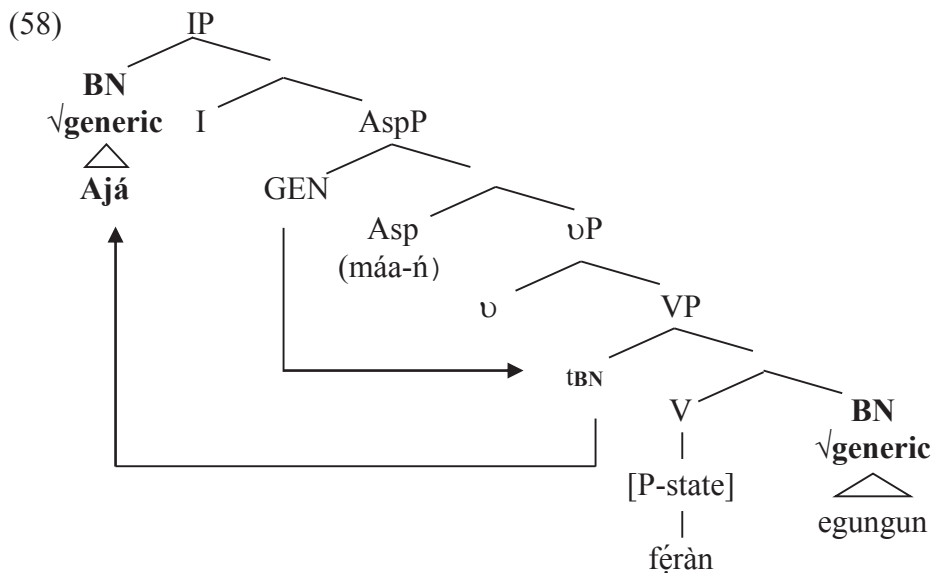
Note that in the surface syntax, the subject NP precedes imperfective. By hypothesis, this is because the subject moves to Spec IP where it receives nominative Case from I(nfl).



The last environment to consider is where bare nouns are construed as generic without the presence of the imperfective. Predictably, this environment optionally permits the presence of imperfective *máa-n* to mark genericity. In (57a), the bare noun *ajá* ‘dog’ occurs as the object of the permanent-state verb *fẹ̀ràn* ‘like’ with an optional imperfective *máa-n*. With or without the imperfective marker, the bare noun is construed as generic. Similarly in (57b) where both subject and object bare nouns of the same verb occur with the imperfective marker, which is optional, both bare nouns are construed as generic.

- (57) a. Mo (máa-n) fẹ̀ràn ajá *object of state*  
 1sg IMP like dog  
 ‘I like dogs.’
- b. Ajá (máa-n) fẹ̀ràn egungun *subject and object of state*  
 dog IMP like bone  
 ‘Dogs like bones.’

I illustrate this with the structure in (58). The optionality of the imperfective marker is reflected by the parentheses.



I summarize the findings of genericity of bare nouns in Yorùbá as (59).

(59) *Generic construal of Yorùbá bare nouns*

|                            | PERMANENT STATE<br>VERBS |     |   | TEMPORARY-STATE &<br>EVENT VERBS |   |       |
|----------------------------|--------------------------|-----|---|----------------------------------|---|-------|
|                            | S & O                    | O   | S | S                                | O | S & O |
| Bare noun                  | √                        | √   | X | X                                | X | X     |
| Imperfective: <i>máa-ń</i> | (√)                      | (√) | √ | √                                | √ | √     |

In conclusion, I have provided a unified analysis of generic construal of bare nouns claiming that any bare noun can be construed as generic if grammatically conditioned. There remains the question of whether the account of Yorùbá genericity can be applied to other languages.

#### 4.2.6 Contrast between English and Yorùbá genericity: Evidence for default aspect

Extending the analysis of Yorùbá bare nouns to English, I propose that imperfective *máa-ń* always introduces a GEN operator. While Yorùbá has an overt imperfective, English has a covert imperfective.

First, observe that English bare nouns (i.e. nouns without overt determiners) can be construed as generic with permanent-state verbs, (60a). The same interpretive effect holds of Yorùbá, (60b).<sup>40</sup>

- (60) a. **Dogs like bones** *P-state*  
GEN<sub>x</sub> GEN<sub>y</sub> [dog(x), bone(y), like(x,y)]
- b. **Ajá f fẹràn egungun** *P-state*  
dog like bone  
‘Dogs like bones.’

However, with events, Yorùbá contrasts with English in how bare nouns are construed. While English bare nouns can be construed as generic, Yorùbá bare nouns cannot be.

- (61) a. **Dogs eat bones** *Event*  
GEN<sub>x</sub> GEN<sub>y</sub> [dog(x), bone(y), like(x,y)]

<sup>40</sup> Further, in English, when the object of an event verb is not a bare noun, genericity still holds:

(i) Dogs like me.

- b.      **Ajá**    jẹ      **egungun**      *Event*  
          dog    eat      bone  
          (i)    ≠‘Dogs eat bones.’  
          (ii)   =‘A dog ate a bone.’

Generic construal of a bare plural noun (subject and object) is possible with both permanent-state and event verbs in English. In Yorùbá, only permanent-state verbs permit generic bare nouns.

(62) *Contrast between Yorùbá and English generic construals*

|                     | Yorùbá | English |
|---------------------|--------|---------|
| Event/T-state & GEN | X      | √       |
| P-State & GEN       | √      | √       |

The generalization that emerges when English is compared to Yorùbá is the following: in English generic construal is available with events/temporary whereas in Yorùbá, it is not. The question that arises is why should this be so?

First, recall that Yorùbá obtains generic readings with event verbs via grammatically conditioned genericity.

- (63)    Ajá      máa-n jẹ      egungun      *generic*  
          dog    IMP    eat      bone

In the corresponding English example in (64), a generic reading is possible without any overt marking of imperfectivity.

- (64)    Dogs eat bones      *generic*  
          GENx GENy [dog(x), bone(y), like(x,y)]

I would like to suggest that the imperfective is the source of genericity with event verbs in both languages. Note however, that in the English examples there is no overt imperfective marker present. The question that arises is how then do we harmonize the facts of Yorùbá (which has an overt imperfective) and the facts of English (where there is no overt imperfective).

Observe that in Yorùbá, the default aspect/tense value is the perfective/past, (65). In English, the default aspect/tense value is the imperfective/present, (66).

- (65) Jímò jẹ ịsu  
 a. Jimo ate yam PAST  
 b. Jimo has eaten yam (Present) PERFECTIVE  
 c. \*Jimo is eating yam \*PROG  
 d. \*Jimo eats yams \*IMP
- (66) Jimmy eats yam  
 a. habitual and imperfective  
 b. historical present<sup>41</sup>

The generalization that emerges is the following. The unmarked verb form in English is the Imperfective whereas the unmarked verb form in Yorùbá is the Perfective. Assuming that the generic construal is closely linked to imperfective, this means that the generic construal is conditioned by the imperfective in both Yorùbá and English. The imperfective in Yorùbá is overtly realized through the use of *máa-ń*, whereas in English the imperfective is covert.

- (67) a. Jímò [<sub>IMP</sub> *máa-ń*] jẹ ịsu *Yorùbá genericity*  
 b. John [<sub>IMP</sub> ∅] eats yam *English genericity*

What remains for further study is whether or not this claim holds in other languages.

### 4.3 What conditions the indefinite construal of Yorùbá bare nouns

I have shown that there are two ways that a bare noun can be construed as generic, via lexically conditioned genericity or via grammatically conditioned genericity. In this section, I account for the indefinite construals of these bare nouns.

#### 4.3.1 Defining indefiniteness

My interpretation of Yorùbá bare nouns as indefinites follows Heim (1982), Enç (1991) and Matthewson (1998). According to Enç's Familiarity and Heim's Novelty Conditions:

All indefinites in a sentence must be novel, in the sense that they must introduce into the domain of discourse referents that were not previously in the discourse. All definites must be familiar, in the sense that the discourse referents they are mapped onto must have been previously introduced into the discourse. In other words, indefinites cannot have antecedents in the discourse, whereas, definites must. (Enç 1991:7)

<sup>41</sup> This is in the context of story telling when a series of successive events is encoded.

We can infer from Enç's idea that a bare noun is indefinite if it is novel at the current stage of the conversation (cf. Heim's 1982, 1988, 2002 *Novelty Condition*). In this case, a bare noun is considered indefinite if it refers to a new discourse referent since it has not been previously mentioned. The notion of novel is illustrated in (68). In particular, it will be wrong to have (68b) at the beginning of a conversation.

(68) *Novel context*

- a. I met [*a* man] today.
- b. \*I met [*the* man] today. (Matthewson 1998:32)

Replicating this in Yorùbá, we see that the bare noun *obìnrin* 'woman' occurs in both indefinite and definite contexts:

- (69) a. Ní ojú àlá mi mo rí **obìnrin**.  
 In face dream 1sg 1sg saw woman  
 'In my dream, I saw a woman.'
- b. **Obìnrin** tí mo rí jẹ iyá à mi  
 woman C 1sg saw COP mother GEN 1sg  
 'The woman that I saw was my mother.'

### 4.3.2 Generic and indefinite construals are in complementary distribution

There are two generalizations that hold for the interpretation of bare nouns as indefinite or generic in Yorùbá:

- (70) a. Whenever indefinite is possible, generic is illicit  
 b. Whenever indefinite is illicit, generic is required

I already gave examples that illustrate the contexts in which the generic construal of bare nouns is possible. What follows is the data that show contexts where indefinite construal of bare nouns is obtained. The examples in (71) show that when a bare noun occurs either as the subject of a transitive event verb (71a), or as the subject of an intransitive event verb (71b), it can be construed as indefinite.

- (71) a. **Ajá** rí mi *subject of transitive event*  
 dog see me  
 = (i) 'A dog saw me.'  
 ≠ (ii) 'Dogs see me.'



<sup>42</sup> See Chapter 5 for the account of how indefinite construal of (74) can be obtained. There I argue that an object bare noun of a state verb has to be marked for specificity.

- (74) a. Mo fẹràn ajá *Object of transitive P-state*  
 1sg like dog  
 $\neq$  (i) 'I like a dog.'  
 $=$  (ii) 'I like dogs.'
- b. Ajá fẹràn egungun *Subject & object of transitive P-state*  
 dog like bone  
 $\neq$  (i) 'A dog likes a bone.'  
 $=$  (ii) 'Dogs like bones.'

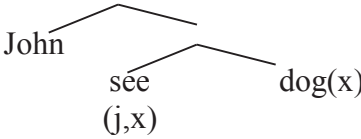
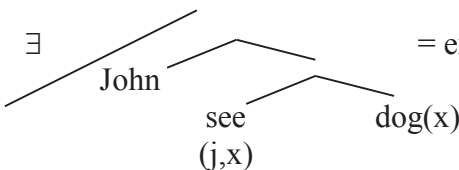
Note that the examples in (74), which do not have indefinite construal are cases where bare nouns are obligatorily construed as generic. Thus, generic and indefinite construals are in complementary distribution.

### 4.3.3 Elsewhere case: Indefinite bare nouns are bound by existential operator

I argue that the construal of bare nouns as indefinite is a last resort i.e. whenever the generic construal is not available then the indefinite construal is obtained as a last resort. In this case, such bare nouns are treated as existentials. The theory of existentiality that I adopt dates back to Heim (1982) and subsequent works. This theory claims that an indefinite noun may be existentially bound. Thus in (75), 'a dog' is considered indefinite in the semantic realm.

- (75) a. John sees a dog  
 b.  $\exists x \text{ dog}(x) \wedge \text{see}(\text{J}, x)$

Heim's idea is that a sentence such as shown in (76a) is interpretable only if the indefinite noun is existentially bound (76b). This is what is referred to as existential closure.

- (76) a. 
- b.  = existential closure

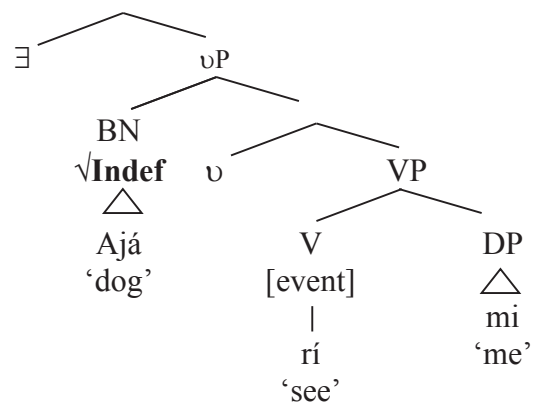
(adapted from Heim 1982)

With this background, I propose that in the absence of the abstract lexical GEN operator, a default existential operator ( $\exists$ ) is introduced. I claim that the indefiniteness of bare nouns in Yorùbá induces the presence of an existential

operator ( $\exists$ ). Bare nouns in Yorùbá can therefore be analyzed as containing (free) variables, assuming that the operator binding bare nouns (variables) saturates the expression (cf. Heim 1982, 1988; Borer 2004:8).

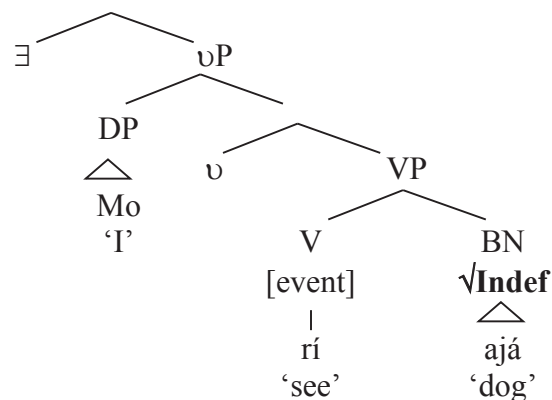
Linking this proposal with the earlier proposal for genericity predicts that  $\exists$  will be in complementary distribution with the generic construal. This in fact is the case. In (77), where the bare noun *ajá* ‘dog’ occurs as the subject of *rí* ‘see’, an event verb, the generic construal is not available.

(77) *Default existential with event verbs: BN in S position*



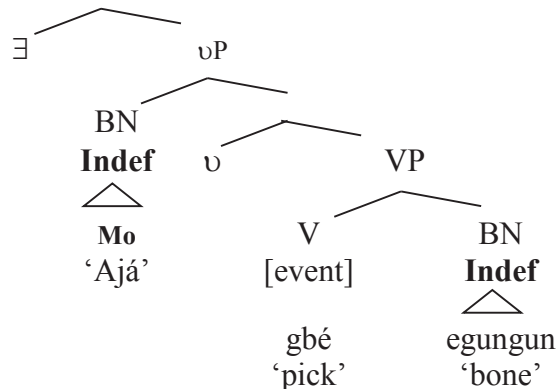
The case of an object bare noun with an event verb is shown in (78). A generic construal is ruled out because the lexical GEN is not compatible with temporary-state and event verbs; the existential operator is introduced as the last resort. Consequently, the object BN noun is interpreted as indefinite.

(78) *Default existential with event verbs: BN in O position*

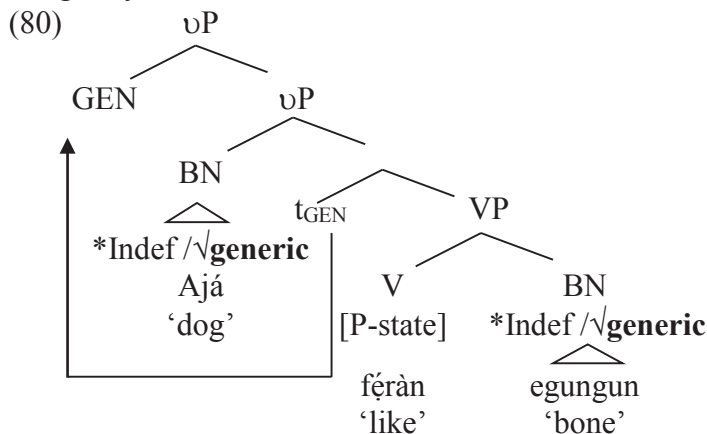


The last case illustrated in (79) involves the occurrence of bare nouns as both the subject and the object of event verbs. They continue to be construed as indefinite because of the same reason: event verbs are not compatible with the lexical GEN operator.

(79) *Default existential with event verbs: BN in S & O position*



On the other hand, whenever a generic construal is required, an indefinite construal is not available. This fact is illustrated in (80), where an indefinite reading is unavailable for the bare nouns since the lexically conditioned generic operator is present. In particular, the introduction of an existential operator is not an option since lexical GEN operator is obligatory.



The summary of these findings is given in (81). In particular, note the complementarity between indefinite and generic construals of bare nouns.

## (81) Complementarity of indefinite and generic construal of Yorùbá bare nouns

|                 | PERMANENT STATE VERBS |   |   | TEMPORARY STATE & EVENT VERBS |   |       |
|-----------------|-----------------------|---|---|-------------------------------|---|-------|
|                 | S & O                 | O | S | S                             | O | S & O |
| Indef Bare noun | √                     | √ | √ | √                             | X | X     |
| GEN Bare noun   | X                     | X | X | X                             | √ | √     |

**4.4 What conditions the definite construal of Yorùbá bare nouns**

This section is concerned with identifying the factors that determine whether bare nouns can be construed as definite. In §4.4.1, I define the term “definiteness”. §4.4.2 discusses contexts where a definite construal is not possible. In §4.4.3, I show that a definite construal of bare nouns arises from Discourse linking.

**4.4.1 Defining Definiteness**

In fashioning out a definition of “definiteness”, I combine Heim’s (1982, 1988) and Matthewson’s (1998) definitions. The issue of a definite noun being familiar is expressed in the *Familiarity Condition*. According to Heim and Matthewson, a noun is *definite* if it is *familiar* at the current stage of the conversation. In order to obtain a definite reading the discourse referent that the noun is mapped onto must have been introduced earlier into the discourse. The examples in (82) are used to illustrate this concept.<sup>43</sup>

- (82) a. I bought [a car] yesterday. Context = Ø  
 b. [The car] is a Toyota brand. Context = 82a

‘Car’ in (82a) is unfamiliar since the hearer does not know about it prior to the time it was first mentioned. If (82b) follows (82a), then it means the hearer knows about the car already, giving rise to a definite construal. So the difference in the construal of ‘car’ as definite or indefinite hinges on the principle of familiarity.

Further, there is an additional term that links familiarity and discourse together, namely the notion of *common ground* (Stalnaker 1974, Strawson 1952 and Matthewson 1998). A definite noun is familiar to the common ground of the discourse, which usually holds between the speaker and the hearer.<sup>44</sup>

<sup>43</sup> See Matthewson (1998: 32) for exceptions to the claim that definite descriptions must always be familiar to the common ground of the discourse.

<sup>44</sup> For more on definitions of definiteness see Enç (1991); Borer (2004) and the references therein.



- 
- (85) S V BN (BN in O position)
- a. Felicitous Context: My wife asked if I saw my friend at the park yesterday to which I answered no. She then asked about my friend's dog and I replied with (85c).
- b. Infelicitous Context: I walked into my house and said (85c) to my wife.
- c. Mo rí **ajá**  
1sg see dog  
'I saw the dog.'

Similarly, *ajá* 'dog' and *egungun* 'bone' in (86c) are properly linked to the discourse context in (86a). This is why they are both interpreted as definite. On the other hand saying (86c) in out-of-the-blue context is infelicitous.

- (86) BN V BN (BN in S and O position)
- a. Felicitous Context: My brother's dog was not with him when he was eating, so he dropped a piece of bone at one corner of the room for the dog and went to the kitchen to wash his hands. By the time he came back, the bone had disappeared. Even though he did not see the dog, he said (86c) to his friend.
- b. Infelicitous Context: I walk into my house and say (86c) to my friend:
- c. **Ajá** jẹ **egungun**  
dog eat bone  
'**The dog** ate **the bone**.'

The next set of examples in (87)-(88) shows bare nouns occurring with permanent state verbs. Again, the BN in the (c) examples can be construed as definite in an appropriate context, as in the (a) examples. But in out-of-the-blue contexts, a definite construal of these bare nouns is not felicitous.

- (87) BN V O (BN in S position)
- a. Felicitous Context: My wife wants to know why Taye always gives Tunde's dog. In reply I say (87c).
- b. Infelicitous Context: I just entered the room and said (87c) to my brother.
- c. **Ajá** fẹràn Táyé  
dog like T.  
'**The dog** likes Taye.'

- (88) S V BN (BN in O position)
- a. Felicitous Context: Taye has a dog and a cat. Each time he feeds them he spends more time with the dog than the cat so his friend wants to know why and the father says (26c).
- b. Infelicitous Context: I just walked in to my wife and said (88c).
- c. Tayé fẹràn **ajá**  
T. like dog  
'Taye likes **the dog**.'
- (89) BN V BN (BN in S and O position)
- a. Felicitous Context: My dog has just finished eating the bones that I served it. It stretched its legs, wagged its tail and rubbed its body against mine. I said (89c) to my friend who was watching with interest:
- b. Infelicitous Context: Without any bone around, I said (89c) to my friend who was playing with my dog.
- c. **Ajá** gbádùn **egungun**  
dog enjoy bone  
'The dog enjoyed the bones.'

The generalization that emerges for the definite construal of a bare noun is straightforward: Yorùbá bare nouns can be interpreted as definite if they are discourse-linked. On the other hand, in an out-of-the-blue context, no bare noun is construed as definite in Yorùbá. These findings are summarized as (90).

(90) *Definite construal of Yorùbá bare nouns*

|                  | TEMPORARY STATE & EVENT VERBS |     |   | PERMANENT STATE VERBS |     |       |
|------------------|-------------------------------|-----|---|-----------------------|-----|-------|
|                  | S & O                         | Obj | S | S                     | Obj | S & O |
| Out-of-the-blue  | X                             | X   | X | X                     | X   | X     |
| Discourse-linked | √                             | √   | √ | √                     | √   | √     |

Finally, the table in (91) brings to light the three construals of bare nouns discussed in the preceding sections.



(91) *GENERIC, INDEFINITE AND DEFINITE construals of Yorùbá bare nouns*

|            | PERMANENT STATE<br>VERBS |   |   | TEMPORARY STATE & EVENT<br>VERBS |   |   |
|------------|--------------------------|---|---|----------------------------------|---|---|
|            | S&O                      | O | S | S&O                              | O | S |
| GENERIC    | √                        | √ | x | x                                | x | x |
| INDEFINITE | x                        | x | √ | √                                | √ | √ |
| DEFINITE   | √                        | √ | √ | √                                | √ | √ |

In what follows, I present some consequences of my analysis.

#### 4.5 Consequences of the analysis

We have established that Yorùbá bare nouns can be construed in one of three ways: generic, indefinite or definite. What remains to be addressed are the consequences of my analysis. In §4.5.1, I discuss the structural ambiguity of bare nouns, while §4.5.2 looks at how the BN analysis plays out in Yorùbá genitive constructions.

##### 4.5.1 Bare nouns are structurally ambiguous

Observe that in some languages whose bare nouns have been analyzed, the interpretation of bare nouns is structurally constrained (Longobardi 1994, Déchaine & Manfredi 1998). This section looks at the internal structure of Yorùbá bare nouns. Based on the facts established in the preceding sections, I claim that there are two structural representations for all bare nouns in the language. On the one hand are bare nouns that do not require contexts for their interpretation. These are the bare nouns that are interpreted as generic or existential. On the other hand are the bare nouns whose interpretation is contextually determined. These are the bare nouns that are interpreted as definite. In principle, there are two possible syntactic structures for bare nouns; they are either analyzed as NPs or as DPs (with a null D). This raises the question of which of the two structures we should adopt for Yorùbá. There are three hypotheses:

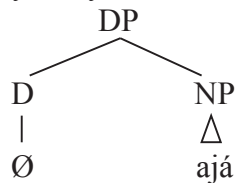
- (92) a. H 1. Bare nouns are always “bare NPs”  
 b. H 2. Bare nouns are always “DPs”  
 c. H 3. Bare nouns are structurally ambiguous between NP and DP.

I argue in the following section that Yorùbá supports the third hypothesis.

#### 4.5.1.1 Bare nouns can be NP or DP

I propose that Yorùbá bare nouns that are construed as definite have a (null) discourse-linked determiner, in which case they may have the structure of a DP, as in (93). On this view, not all bare nouns are bare in structure at the abstract level (cf. Cheng & Sybesma's 1999: 518 discussion of Chinese bare nouns).

(93) *Structure for definite construal of bare N*



On the other hand, I propose that both indefinite and generic bare nouns, which have been shown to be in complementary distribution, have an NP structure (94).<sup>45</sup>

(94) *Structure for indefinite/generic construal of bare N*

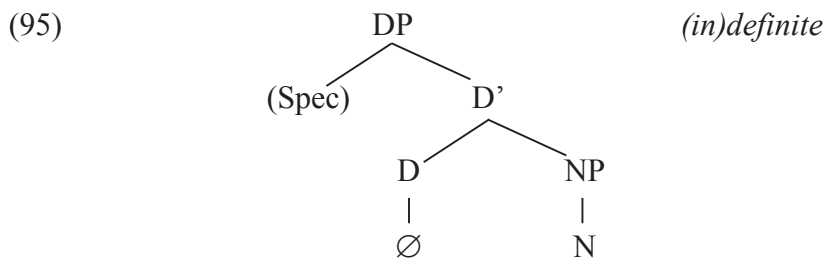


There seems to be no motivation for claiming that indefinite bare nouns have a different structure (DP) from generic bare nouns (NP) in the current analysis. As I have shown generic and existential construals of bare nouns in Yorùbá are in complementary distribution. As such, they should have the same syntactic structure.

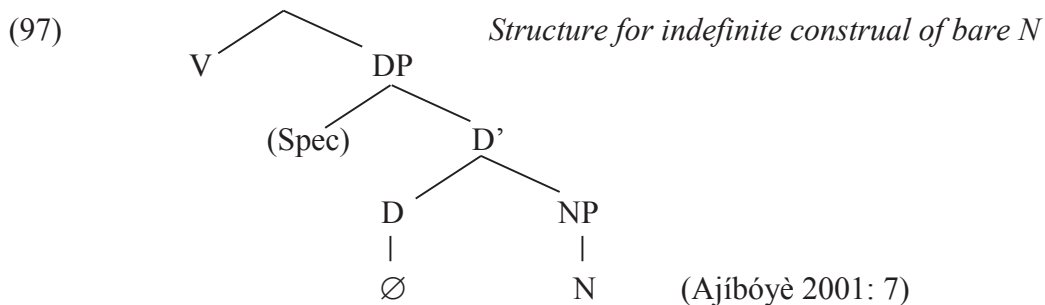
#### 4.5.1.2 Critique of previous analysis (Ajíbóyè 2001)

Ajíbóyè (2001) claims that Yorùbá bare nouns with (in)definite construals are DPs, (95); whereas bare Ns with generic construals are NPs, (94) (cf. Déchaine & Manfredi 1998). One major difference between this previous proposal and the current proposal Ajíbóyè (2001) is the issue of government.

<sup>45</sup> This is contrary to Müller (2003: 72) where it is claimed that ‘genericity may be expressed by the Determiner Phrase (DP)’.

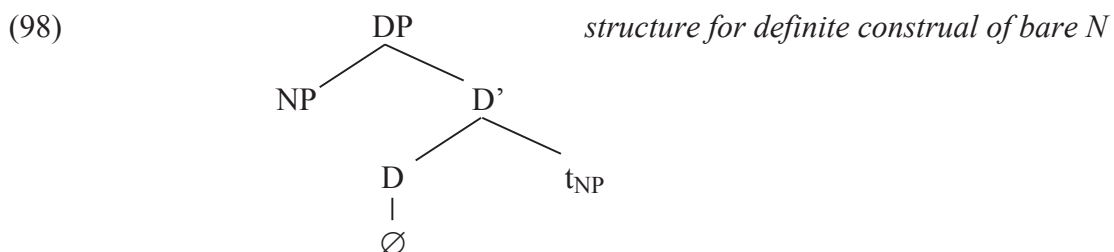


Ajíbóyè (2001) further distinguishes definite and indefinite DPs, following Longobardi (1994), who claimed that null D is indefinite (i.e. existential) but only if governed. In that analysis, null D was possible only if DP was governed by the verb.



So, for the structure of indefinite bare nouns in object position, the DP is base generated with the NP occurring as the complement of the null D.

On the other hand, a subject DP is said to be ungoverned, so subject null D is (correctly) predicted to *not* be indefinite in Yorùbá. On what accounts for the definite construal of bare noun subjects, following Longobardi (1994), Ajíbóyè (2001) proposed that bare Ns are interpreted as definite if NP moves to Spec DP (98). One thing to note is that this movement is not detectable, as D is always null.



The table in (99) below summarizes the findings in (Ajíbóyè 2001).

(99) *Summary of bare noun construals in Yorùbá (Ajíbóyè 2001)*

| <i>Construal of bare noun</i> | <i>Subject</i> | <i>Object</i> | <i>Structure</i>                   |
|-------------------------------|----------------|---------------|------------------------------------|
| Indefinite                    | *              | √             | DP with governed null D            |
| Definite                      | √              | √             | DP with movement of NP to Spec, DP |
| Generic                       | √              | √             | NP                                 |

The analysis is faced with the open question: what permits movement of NP to Spec, DP for definite bare nouns? Why should both definite and indefinite bare nouns have one structure and yet allow generic bare nouns to have a different structure?

In the present account, I have shown that both generic and indefinite bare nouns pattern the same way. In light of this I have proposed that they should have the same structure. On the other hand, since definite bare nouns are context sensitive, their interpretation is not sensitive to position. All that is required is that they be discourse-linked. Thus, there is the need to modify the proposal put forward in Ajíbóyè (2001).

#### 4.5.2 Implication for the analysis of genitive constructions

In Chapter 2, it was established that the DP inside the genitive construction has an overt D in the form of the MTS.

- (100) Ìwọ̀fún            ni            [ọkọ            ọ            Tọ̀nà]            *definite*  
                  optional            FOC    vehicle            MTS    T.  
                  ‘Traveling in Tona’s vehicle is optional.’

The present chapter proposes that bare nouns that are definite have the structure of a DP with a null D. Bringing these two ideas together predicts that Yorùbá genitive DPs should be construed as definite since it has a D position that is occupied by the MTS, which is sometimes null.

However, in certain context, a genitive construction may be construed as indefinite. One context is where the speaker has knowledge of the referent i.e., but it has to be marked for specificity. This is the situation where by the speaker knows that Tona, a transporter has more than one vehicle and he only saw one of such vehicles, (101).<sup>46</sup>

<sup>46</sup> For account of specificity, see Chapter 5.

- (101) Mo      rí      [òkò      ọ      Tòná      kan]      *indefinite*  
 1sg    see    vehicle      MTS    T.      certain  
 ‘I saw a certain vehicle of Tona’s.’

The point that is being established here is that the proposal that definite bare nouns have the structure of a DP has support from genitive constructions whose D has no independent morpheme and they are also interpreted as definite.

#### 4.6 Conclusion

I have established that a bare noun that is analyzed as an NP can be construed as generic if lexically conditioned with permanent state verbs or grammatically conditioned through the use of the imperfective *máa-ń* in transitory verbs. Otherwise it is existential. On the other hand, a Yorùbá bare noun that has the structure of a DP (in an appropriate discourse context) is construed as definite, and it is analyzed as a DP. This is summarized in (102).

(102) *Summary: Construals of bare nouns in Yorùbá*

| surface form | Structure                         | interpretation              | conditioned by:                                                                          |
|--------------|-----------------------------------|-----------------------------|------------------------------------------------------------------------------------------|
| N            | [ <sub>NP</sub> N]                | Generic<br>(GEN)            | i) lexical GEN operator (i.e. P-state verb)                                              |
|              |                                   |                             | ii) grammatical GEN operator (i.e. imperfective <i>máa-ń</i> ) (i.e. Event/T-state verb) |
| N            | [ <sub>NP</sub> N]                | Indefinite<br>( $\exists$ ) | elsewhere condition:<br>if BN $\neq$ GEN, then BN = $\exists$                            |
| N            | [ <sub>DP</sub> D $\emptyset$ NP] | definite<br>(Def)           | contextually conditioned                                                                 |

I extend this proposal to English and make the generalization that a language can either make use of the imperfective to mark genericity overtly (as in Yorùbá) or covertly (as in English). In Chapter 5, I account for another dimension of the interpretation of nominal expressions, namely the conditions under which they are construed as specific or salient.



## Chapter 5

### Specificity and Salience in Yorùbá

---

#### 5 Introduction

The claim of Chapter 4 was that when a bare noun is interpreted as generic or indefinite, it must have the structure of an NP, (1). On the other hand, when a bare noun is interpreted as definite, it must have the structure of a DP, (2).

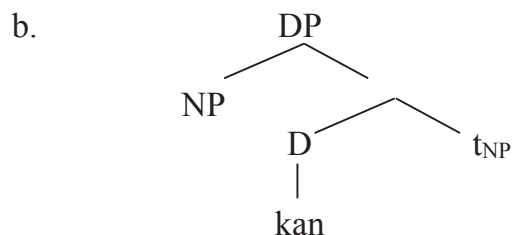
- (1) a. GEN/∃ = [NP]  
b. Mo kórirá [ajá] *generic*  
1sg hate dog  
'I hate dogs.'  
c. Mo rí [ajá] *indefinite*  
1sg see dog  
'I saw a dog.'
- (2) a. DEF = [DØ NP]  
b. (in appropriate discourse)  
Mo rí [ajá] *definite*  
1sg see dog  
'I saw the dog.'

The goal of this chapter is to discuss how specificity and salience are realized in Yorùbá nominal expressions. First, when a noun takes *kan* (3a), it has the interpretation of 'a certain N', whereas if the same noun takes *náà*, (3b) it can mean 'the particular N'.

- (3) a. Mo rí ajá **kan** *specificity*  
1sg see dog certain  
'I saw a certain dog.'
- b. Mo rí aja **náà** *salience*  
1sg see dog very  
'I saw the very dog.'

I argue that while indefinite NPs are morphologically marked for specificity<sup>1</sup> with *kan*, definite DPs are morphologically marked for salience with *náà*. I demonstrate that a nominal expression is interpreted as specific if it refers to an entity the speaker has some knowledge about (cf. Aboh 2004:77). In (3a), the dog must be known to the speaker whereas (3b) indicates that the dog in question must have not only been mentioned before, it must be known to both the speaker and the hearer. I claim that *kan* marks NPs as specific and as such must be a D, (4).

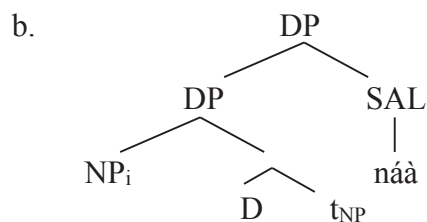
- (4) a.  $[_{DP} NP_i [D \textit{kan}] t_i]$



Recall from Chapter 4, the null D marks bare nouns as definite. This is a contrast between empty D and overt D in Yorùbá: a null D marks bare nouns as definite whereas an overt D marks bare nouns as specific.

Further, I propose that *náà* as a marker of salience is a modifier and it is to be analyzed as an adjunct to DP with the structure in (5).

- (5) a.  $[_{DP} NP [D \emptyset] t_i] \textit{náà}$



The chapter is organized as follows. §5.1 accounts for specificity in Yorùbá. §5.2 discusses salience in Yorùbá. The focus of §5.3 is the syntax of *kan* and *náà* while in §5.4, I give an account of number interpretation of nominal expressions when combined with *náà*. §5.5 concludes.

<sup>1</sup>See Hellan (1981); Fodor and Sag (1982); Enç (1991); Ludlow and Neale (1991); Ioup (1997); and von Heusinger (2002).



### 5.1 Specificity in Yorùbá: *kan*

This section surveys the way specificity is marked in Yorùbá and three other unrelated languages, namely English, Turkish and Gungbe. I find out that there are different ways by which specificity is marked in these languages. I show that while Yorùbá uses the element *kan*, English optionally marks specificity with adjectives, Turkish does so with accusative and genitive Case markers, and Gungbe with *dé*. First, I start by defining the term “specificity”.<sup>2</sup>

#### 5.1.1 Defining specificity

One important distinction at the discourse level relates to the speaker’s knowledge of the referent. This is often discussed in terms of specificity, where [+specific] corresponds to a referent known to the speaker and [-specific] corresponds to a referent that is not known to the speaker (Ludlow and Neale 1991; Haspelmath 1997:108-109). Recall that the [ $\pm$ definite] distinction is based on the discourse status of the referent (new/familiar). These two properties interact as follows. First an unfamiliar/new discourse referent, i.e. an indefinite NP, may be known or unknown to the speaker: an indefinite NP may be [+specific] or [-specific]. In contrast, a familiar discourse referent i.e., a definite DP is necessarily known to the speaker: a definite DP must be [+specific]. Thus an indefinite NP can be non-specific or specific, while a definite DP must be specific. The table in (6) summarizes this.

(6) *Specificity versus (in)definiteness* (cf. Enç 1991)

|            |            |
|------------|------------|
| indefinite | definite   |
| -def, -spf | +def, +spf |
| -def, +spf |            |

The table in (6) divides nouns into three categories. One category consists of nouns that are indefinite and at the same time non-specific. Another category consists of nouns that are indefinite but they are specific. The third category consists of nouns that are definite and by implication must be specific. With this in mind, I consider how specificity is marked in Yorùbá and three other languages.

<sup>2</sup> The notion of specificity as a key concept in the semantics of reference is not novel in the literature (Fodor 1971; Enç 1991; Ludlow and Neale 1991; Haspelmath 1997; Mathewson 1998; Ginnakidou 1998; von Stechow 2002; Aboh 2004 among others).

### 5.1.2 Marking specificity

This section investigates ways by which nouns are marked for specificity in Yorùbá, English, Turkish and Gungbe and establishes that the four languages can all overtly mark indefinite nouns for specificity.

#### 5.1.2.1 Yorùbá

In Yorùbá, an indefinite bare noun that is new and unfamiliar by definition can only be interpreted as non-specific. In (7c), *àga* ‘chair’ is indefinite because Jibola is looking for just any chair to sit on; he has no particular chair in mind.

- (7) a. Background: When Jibola is tired, he sits down on whatever chair is at hand.
- b. Àáré mú Jíbólá  
fatigue catch J.  
Jibola is tired
- c. Ó    ñ    wá    **àga**   tí   yóò   jókòó   lé                      *indefinite non-specific*  
3sg   Prog look chair C   Fut sit   on  
‘He was looking for **a chair** to sit on.’
- d. Ó    rí    **àwọn àga**    ní    igun    yàrá                      *indefinite non-specific*  
3sg see PL chair    Loc corner room  
‘He saw **some chairs** at the corner of his room.’
- e. Ó    sì    jókòó    lóri    **ọ̀kan**    nínú                                              *indefinite non-specific*  
3sg then sit    on one among  
**àwọn àga**    tí    ó    rí  
PL chair C 3sg see  
‘He then sat on **one of the chairs** that he saw.’

In (8c), the first, *àga* ‘chair’ is specific because there is a particular chair Jibola looks for whenever he is tired and unless he finds that chair, he doesn’t sit down. And in (8d), *àga* ‘chair’ has the status of a definite noun.

- (8) a. Background: When Jibola is tired, there is a particular chair in his house that he sits on.
- b. Àáré mú Jíbólá  
fatigue catch J.  
Jibola is tired

- c. Ó    ñ    wá            [àga    **kan**]                    *indefinite specific*  
      3sg Prog search       chair    spec  
      tí    ó       maa       ñ       jókòó    lé  
      C    3sg    HAB    Prog    sit       on  
      ‘He is looking for **a certain** chair that he sits on.’
- d. Ó    rí    [àga tí    ó       ñ       wá ]                    *definite specific*  
      3sg see   chair C   3sg    Prog search  
      nó    igun       yàrá  
      Loc corner    room  
      ‘He saw **the chair** he is looking for at the corner of the room.’
- e. Ó    sì    jókòó    lé    e  
      3sg then sit       on    3sg  
      ‘He then sits on it.’

Because Jibola has a particular chair in mind, the chair needs to be marked for specificity. In Yorùbá, to make such nouns specific requires the presence of *kan*<sup>3</sup>, (8c). Going by the examples in (7) where Jibola is looking for just any chair to sit on and (8) where he has a particular chair in mind, with the latter requiring the element *kan*, one can conclude that this element functions as a specificity marker. Observe that the bare N in (8d) is construed as definite specific because it is the

<sup>3</sup> The word *kan* is ambiguous between the numeral ‘one’ and the specific marker ‘certain’.

- (i) Mo ra ilé kan  
      1sg buy house one  
      = ‘I bought one house.’  
      = ‘I bought a certain house.’

The numeral ‘one’ and the specificity marker are different morphemes underlyingly. The numeral has an initial vowel /ò-*kan*/, which deletes when it functions as a modifier, whereas the specificity marker is consonant initial, *kan*. In (ii-a) the initial vowel of the numeral one is deleted. This is not unusual in cases where two vowels are juxtaposed across word boundary (Bámgbóšé 1967, Oyèlárán 1971 among others). In (ii-b), òkan ‘one’ appears in sentence-initial position, in which case the initial vowel is retained.

- (ii) a. Mo ra ilé kan  
      1sg buy house one  
      ‘I bought one house.’  
      b. òkan ní mo rà.  
      one FOC 1sg buy  
      ‘It is one (X) that I bought.’

In (iii-a), *kan* is the specific marker when linked with (iii-b).

- (iii) a. Mo rí ilé **kan** ní Ìbàdàn  
      1sg see house certain P  
      ‘I saw a certain house in Ibadan.’  
      b. Ilé **nàà** ga  
      house very tall  
      ‘The very house is tall.’

specific chair that he is looking for that he found. This means that while indefinite bare nouns are marked for specificity, Yorùbá definite bare nouns are not overtly marked for specificity.

### 5.1.2.2 English

In English, an indefinite NP can be interpreted as specific or non-specific. The examples in (9) show that indefinite NPs may be specific without being morphologically marked.

- (9) a. I want a book. *specific/non-specific*  
 b. I would like to buy a coat. *specific/non-specific*

In English, it is also possible for adjectives like ‘*certain*’, ‘*particular*’, and ‘*specific*’ to mark indefinite NPs as specific.<sup>4</sup> In this case, specificity is overtly marked (Enç 1991, von Heusinger 2002).

- (10) a. I want a **certain** book. *specific*  
 b. I like to watch a **particular** movie. *specific*

Comparing English to Yorùbá, there is one striking similarity and difference between the two: marking specificity on indefinite NPs is not optional in Yorùbá as it is in English. On the other hand, both behave the same way with respect to marking definite nouns as specific they require no overt marking.

### 5.1.2.3 Turkish

According to Enç (1991) and von Heusinger (2002), Turkish marks specificity with overt Case morphology. In this language, both object and subject nouns can be so marked for specificity. First, let us look at how specificity is marked on object NPs.

An NP that lacks accusative case is interpreted as non-specific (11a & 12a) whereas an object that bears the accusative morpheme such as *-yu* and *-i*, in (11b) and (12b) respectively can only be interpreted as specific.

- (11) a. Ali bir **piyano** kiralamak istiyor *non-specific indefinite*  
 Ali one piano to rent wants  
 ‘Ali wants to rent **a piano**.’

<sup>4</sup> As observed by Enç, there are certain restrictions on how adjectives of specificity work for English. For example, there is a limitation on distribution. See Enç (1991: 4) for details.

- 
- b. Ali bir **piyano-yu** kiralamak istiyor *specific indefinite*  
 Ali one piano-Acc to rent wants  
 ‘Ali wants to rent **a certain piano**.’ (Enç 1991:4-5)
- (12) a. (ben) **bir kitap** oku-du-m *non-specific indefinite*  
 I a book read-past-1sg  
 ‘I read **a book**.’
- b. (ben) **bir kitab-i** oku-du-m *specific indefinite*  
 I a book-acc read-past-1sg  
 ‘I read **a certain book**.’ (von Heusinger 2002: 255)

The suffixes *-yu*, (11b) and *-i*, (12b) perform a dual role of marking accusative Case and specificity on the object NP they attach to. The distinction between a specific and non-specific NP is easily identified: if [+ACC], then [+specific].

As reported in von Heusinger (2002), the same contrast exists for subject NPs. Specificity is marked on the subject that bears a genitive Case. “An embedded subject with the genitive-case suffix is interpreted as specific and one without the genitive-case suffix as non-specific (p.256).” In (13b), the genitive case *-un* marks *haydut* ‘robber’ as specific.

- (13) a. [köy-ü **haydut** bas-ti-in]-i *non-specific indefinite*  
 village-acc robber raid-Nom-poss.3sg]-acc  
 duy-du-m.  
 hear-Past-1sg  
 ‘I heard that **robbers** raided the village.
- b. [köy-ü **bir haydut-un** bas-ti-in]-i *specific indefinite*  
 village-acc a robber-gen raid-Nom-poss.3sg]-acc  
 duy-du-m.  
 hear-Past-1sg  
 ‘I heard that **a certain robber** raided the village.  
 (von Heusinger 2002:256)

The contrast between Yorùbá and Turkish is that while specificity is always marked by the same morpheme *kan* in Yorùbá, this is not so in Turkish. The marking of specificity in Turkish depends on its syntactic position: in object position, Accusative *-yu/-i* marks specificity, in subject position, Genitive *-un* marks specificity.

### 5.1.2.4 Gungbe

Gungbe is part of the Gbe group of languages (a sub-group of the Kwa family) spoken in parts of Benin and Togo in West Africa (Aboh 1999). As reported in Aboh (2004:76-77), when a noun occurs by itself as in (14a), it is construed as non-specific. But when a noun takes *dé* as in (14b), that noun is construed as specific.

- (14) a. Kókú m̀n távò cè bò d̀  
 K. see-perf table 1sg-Poss and say-perf  
 émi ná x̀ távò  
 3sg Fut buy table  
 ‘Koku saw my table and then said he would buy **a table**.’
- b. Kókú m̀n távò cè bò d̀  
 K. see-perf table 1sg-Poss and say-perf  
 émi ná x̀ távò *dé*  
 3sg Fut buy table spf<sub>[-def]</sub>  
 ‘Koku saw my table and then said he would buy **a specific table**.’  
 (Aboh 2004:77)

In Gungbe, just as indefinite DPs are overtly marked for specificity, definite DPs are also marked for specificity. In (15a), *dé* is the specific marker for *távò* ‘table’ to make it specific (i.e. an indefinite specific table). In (15b), when *távò* ‘table’ is accompanied by *lò* it is construed as definite and specific.

- (15) a. Kókú m̀n távò cè bò d̀ *specific indefinite*  
 K. see-perf table 1sg-Poss and say-perf  
 émi ná x̀ [távò *dé*]  
 3sg Fut buy table spf<sub>[-def]</sub>  
 ‘Koku saw my table and then said he would buy **a specific table**.’
- b. Kókú m̀n távò cè bò d̀ *specific definite*  
 K. see-perf table 1sg-Poss and say-perf  
 émi ná x̀ [távò *lò*]  
 3sg Fut buy table spf<sub>[+def]</sub>  
 ‘Koku saw my table and then said he would buy **that specific table**.’  
 (Aboh 2004: 76)

Yorùbá and Gungbe show similarity in the sense that they both have dedicated specificity morphemes, which follow the nouns they so mark. They differ in one

respect: while Yorùbá covertly marks definite nouns as specific, Gungbe does so with an overt morpheme.

In (16) is the summary of how indefinite NPs are marked for specificity in the languages discussed here. While both Yorùbá and Gungbe obligatorily mark nouns for specificity with dedicated words: *kan* and *dé* respectively, Turkish indirectly marks specificity through Case. English on the other hand optionally marks specificity with a range of lexical items (usually drawn from the adjective class).

(16) *Marking specificity on indefinite NPs in Yorùbá, English, Turkish, and Gungbe*

|                         | Yorùbá       | English                                                                        | Turkish | Gungbe       |
|-------------------------|--------------|--------------------------------------------------------------------------------|---------|--------------|
| non-specific indefinite | BN           | a N                                                                            | BN      | BN           |
| specific indefinite     | N <b>kan</b> | a ( <b>certain</b> ) N<br>a ( <b>specific</b> ) N<br>a ( <b>particular</b> ) N | N-CASE  | N- <b>dé</b> |

On a final note, observe that Gungbe goes a step further than other languages under comparison in the sense that it overtly marks definite DPs for specificity with *lɔ́*. The standard assumption in the literature is that definite DPs are inherently [+specific] and need not be morphologically marked for specificity. This is consistent with the data from Yorùbá and English. The Gungbe data indicate that there is a need for further research on the status of *lɔ́* to determine whether it does something else rather than being a specific marker as reported in Aboh (2004).

I now turn to the question of how to test for specificity. In what follows, I carry out two of such tests: the Speaker knowledge test (§5.1.3) and the Subset relation test (§5.1.4).

### 5.1.3 Testing for specificity I: Speaker knowledge test (Ludlow and Neale 1991)

The focus in this section is the Speaker knowledge test of Ludlow and Neale (1991). Their test for specificity relies on whether or not the speaker has knowledge of the referent. First, I start with non-knowledge of a referent. I illustrate this in (17).

- (17) a. Mo    ń       lọ       lónà   oko  
          1sg   Prog   go       P-path farm  
          ‘I was walking along a path to my farm.’
- b. Mo    rí       òyà  
          1sg   see     grass-cutter  
          ‘I saw **a grass-cutter**.<sup>5</sup>’
- indefinite non-specific*

<sup>5</sup> This is a kind of animal of the rodent family.





### 5.1.4 Testing for specificity II: The subset relation (Enç 1991)

The second test that I consider in my analysis of Yorùbá specificity is from Enç (1991). Enç claims that specificity involves a weak link that of being a subset of or standing in some recoverable relation to a familiar object. In Enç's analysis, if there are two sentences such that the NP in the second sentence is specific, the specific NP picks out a member of the previously introduced NP in the first sentence. On the other hand, a non-specific NP picks out a separate entity, not already under discussion. In that case, such an NP is in a disjoint relation to the first referent. I adopt this subset relation test first to Yorùbá data and extend this to English and Turkish.

#### 5.1.4.1 Yorùbá

A Yorùbá indefinite non-specific NP behaves as predicted by the Enç test in the sense that it is usually in a disjoint relation with a previously mentioned NP. The only available interpretation of *àwọn ọmọbìnrin* 'girls' in (21) in relation to *àwọn ọmọ* 'children' in (20) is that of disjointness as there is no way to link the non-specific *ọmọbìnrin* 'girl' to *àwọn ọmọ* 'children'.

- (20) [Àwọn ọmọ] ní      ọ̀rẹ́ nínú      ọ̀gbà  
 PL    child    prog play inside garden  
 'Children are playing in the garden.'

- (21) [Àwọn ọmọbìnrin]    gbádùn ara-wọn                      *non-specific indefinite*  
 PL    girl                    enjoy    themselves  
 'Some girls enjoyed themselves.'

The disjoint relation is illustrated in (22).

- (22) *Yorùbá Disjoint relation*

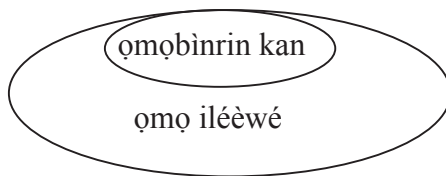


However, a subset relation can also hold between two NPs in one of two ways. First is where the second NP is marked for specificity and is a subset of a definite NP. The examples in (23) and the illustration in (24) show this type. Here *ọmọbìnrin* 'a girl' is marked for specificity by *kan*: *ọmọbìnrin kan* 'a certain girl' is interpreted as a subset of *ọmọ iléèwé* 'school children'.

- (23) a. Context: Some students asked Sehun to give them some water. After they had gone, the following dialogue ensued between him and his mother.
- b. Mother: Àwọn ta lo bu omi fún  
 PL WH Foc-2sg take water for  
 'Who are those people you served with water?'
- c. Sehun. Àwọn ọmọ iléèwé *definite specific*  
 PL child school  
 'the school children'
- d. Mother: Sè o mò wọn  
 Q-tag 2sg know 3pl  
 'Do you know them?'
- e. Sehun Mo mò ọmọbìnrin kan *indefinite specific*  
 1sg know girl Spf  
 'I know **a certain girl** (among them).'

This subset relation is shown in the diagram in (24).

- (24) Yorùbá subset relation: *Specific indefinite*

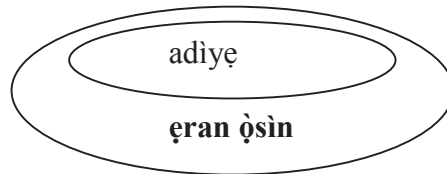


The other case is where the second NP is a definite specific and is a subset of an indefinite non-specific.

- (25) a. Olú ní ẹran ọ̀sìn *indefinite non-specific*  
 O. have animal domestic  
 'Olu has **some domestic animals**'
- b. Ní àkókò oúnjẹ  
 in time food  
 When it is time to feed them
- c. [Adìyẹ] ni ó máa ń kòkò tójú *definite specific*  
 chicken Foc 3sg HAB prog first take-care  
 'He feeds **the chickens** first.'

In (25c), *adiyẹ* ‘chicken’ is one of the domestic animals that has been previously mentioned, hence it is definite and qualifies to be a subset of the other domestic animals. I illustrate this with the subset diagram in (26).

(26) *Yorùbá subset relation: specific definite*



I present the same test for English in the next section and show that English parallels Yorùbá.

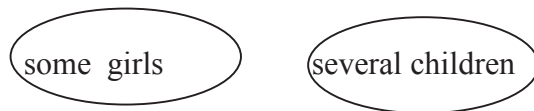
#### 5.1.4.2 English

The examples that I present here are an adaptation of Enç’s (1991) data. Consider the pair of sentences in (27) the first of which contains the NP “several children” (27a), and the second NP containing “some girls” (27b).

- (27) a. [Several children] were playing in the yard.  
b. [Some girls] enjoyed themselves.

Enç’s analysis predicts that *girls* in (27b) can only be specific if it is a member of *children* in (27a). If it is non-specific, then it means *girls* is not a subset of *children*. The latter is the case i.e., the NP *girls* is in disjoint relation to the NP *children*. This reading is shown in (28).

(28) *Disjoint relation in English*



I turn to the case of an indefinite specific, which shows a subset relation.

(29) A lot of children are expected in the hall.

Sentence 1: **Many children** came in.

I know **a girl**.

Meaning 1: *A girl* is part of the set of children = specific indefinite

Meaning 2: *A girl* is distinct from the set of children = non-specific indefinite

The subset relation holds, if *girl* is part of the set of *children* earlier mentioned. In this case, the Meaning 1 is assumed, that of a specific indefinite. This is illustrated in the diagram in (30).

(30) *Subset relation in English*

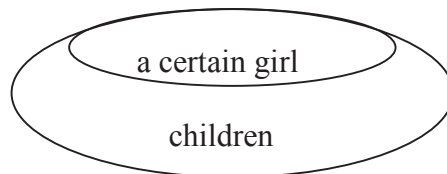


It is also possible for an NP to be overtly marked for specificity:

- (31) a. A lot of children are being expected in the hall.  
 b. Many **children** came in.  
 c. I know a **certain girl**.

In (31) *a certain girl* is part of the set of children, since it is a specific indefinite. I show the relevant subset relation in (32).

(32)



To conclude, in English, the subset relation holds between two NPs if one of them is (overtly) marked for specificity.

#### 5.1.4.3 Turkish

Recall that in Turkish, the signal for specificity of an object NP is the presence of the accusative Case marker. In this language, non-specificity also implies disjointness. I illustrate this in the following examples.

- (33) a. Odam-a **birkaç çocuk** girdi *non-specific indefinite*  
 my-room-Dat several child entered  
 ‘**Several children** entered my room.’ (Enç 1991: 6)
- b. **İki kız** tanıyordum *non-specific indefinite*  
 two girl I-knew  
 ‘I knew **two girls**.’ (Enç 1991: 6)

*İki kız* ‘two girls’ in (33b) is expected to show a disjoint relation with *birkaç çocuk* ‘several children’ in (33a) since it is not marked for accusative. I show the disjoint relation between the two NPs in (34).

(34) *Disjoint relation in Turkish*



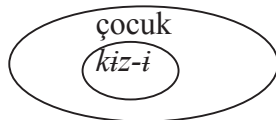
However, when an NP takes an Accusative Case, it is interpreted as specific. Thus, *iki kız-ı* ‘two girls’ in (35b) is a subset of *birkaç çocuk* ‘several children’ in (35) since it is marked for the accusative Case.

(35) a. Odam-a **birkaç çocuk** girdi  
my-room-Dat several child entered  
‘Several children entered my room.’ (Enç 1991: 6)

b. **İki kız-ı** tanıyordum  
two girl-Acc I-knew  
‘I knew two girls.’ (Enç 1991: 5)

The subset relation is illustrated in (36).

(36) *Subset relation in Turkish*



In conclusion, I have shown that though languages may use different mechanisms to mark specificity, they converge with respect to these two tests: speaker knowledge and the subset relation. An NP that a speaker has knowledge of is always specific. Similarly, an NP that is a subset of another NP previously mentioned in the discourse is necessarily specific.

## 5.2 Salience in Yorùbá: *náà*

In this section, I demonstrate that the element *náà* marks nouns as salient in one of three ways: by picking out a unique referent (37a), by identifying a referent with a previously mentioned referent, (37b) or by adding a referent to a previously established set (37c).

- 
- (37) a. Ajá náà ni ó lè gbó mi  
 dog SAL FOC 3sg able bark 1sg  
 'It is the ONLY dog that can bark at me.' = *Uniqueness*
- b. Mo rí ajá náà  
 1sg see dog SAL  
 'I saw the VERY dog.' = *Identity*
- c. Ajá náà rí mi  
 dog SAL see 1sg  
 'The dog ALSO saw me.' = *Additive*

Some linguists have claimed that *náà* is a determiner (Bámgbósé 1967, 2000; Awóbùlúyì 1978) while some linguists describe it as post-nominal modifier (Déchaine 1993: 84). In what follows, I am going to show that the function and distribution of *náà* leads one to conclude that it is not a determiner but a marker of salience.

### 5.2.1 Defining Salience

Simply put, saliency implies being significant and striking. A noun is made salient when it is particularly important to the speaker and he wants to draw the audience's attention to its striking feature. As pointed out above, salience marking with *náà* performs three functions in Yorùbá: the “*uniqueness*” function, the “*additive*” function, and the “*identity*” function. I define each of these terms in the following subsections.

#### 5.2.1.1 Uniqueness

There are two different factors that people consider when they talk about definiteness: uniqueness and familiarity. The Yorùbá salience marker *náà*, like definites, may also pick out a unique referent. A noun phrase that encodes uniqueness implies that the individual it refers to (say ‘the dog’) is distinct from all other referents in the context, it's a ‘one of a kind’ referent. For example, in a context where I have a dog and a cat as pets, if I say, “I’m going to go feed the cat”, I mean the unique, ‘one of a kind’ cat. There are no other cats in the context. This meaning shows up most clearly in English when the determiner gets focused – “THE cat”. Levinson (2005:1) claims that the referent of a noun phrase is unique or uniquely identifiable if there is only one most salient candidate for being the referent. In other words, the entity is distinguished from other members of the set as unique in some

way.<sup>6</sup> In this case, A is unique since it is the only referent, which can satisfy the description. This is schematized in (38).

- (38) *Uniqueness function* = only N  
A satisfies a description that the other discourse referents: B, C, D don't satisfy.

|   |   |   |   |
|---|---|---|---|
| Ⓐ | B | C | D |
|---|---|---|---|

### 5.2.1.2 Additivity

In addition to having a uniqueness function, the Yorùbá salience marker *náà* also has an additive function.<sup>7</sup> This is schematized in (39), when A is added to the set of relevant discourse referents.

- (39) *Additive function* = also N  
A satisfies a description that the other discourse referents B C D previously satisfied.

|   |   |   |
|---|---|---|
| B | C | D |
|---|---|---|

|   |   |   |   |
|---|---|---|---|
| Ⓐ | B | C | D |
|---|---|---|---|

### 5.2.1.3 Identity

A third function associated with the Yorùbá salience marker *náà* is the identity function. Thus, a noun marked by *náà* is understood to be identical to a previously mentioned discourse referent. This is schematized in (40) where A' is identical to A.

<sup>6</sup> Another view is contained in Heim (1988) where there is some sense in which an element that denotes uniqueness relates to specificity.

<sup>7</sup> According to Cohen (2004) additives are special types of focus-sensitive particles.

- (40) *Identity* function = the very N  
 A' satisfies the same description as A i.e. A' is identical to A



In what follows, I illustrate how salience is marked in Yorùbá and English. I go into details by showing how Yorùbá *náà* performs the three different functions of uniqueness, additivity and identity. I also show that while Yorùbá marks salience with *náà*, English has no dedicated morphology for this function.

### 5.2.2 Marking salience in Yorùbá

I establish here that the presence of *náà* in Yorùbá nominal expressions marks salience rather than definiteness. I start by showing that the misconception of interpreting *náà* as a definite determiner can be attributed to the fact that *náà* is often translated as *the* in English (Manfredi 1992).<sup>8</sup> Consider (41) where the (a) example has a bare noun with an indefinite construal while in the (b) example the same noun marked with *náà* has a definite construal.

- (41) a. Mo ra ilé  
           1sg buy house  
           'I bought **a house**.'
- b. Ilé náà ní yàrá méje  
           house náà have room seven  
           '**The house** has seven rooms.'

In (41b), the intuition of most native speakers of Yorùbá is that *náà* is the same as English *the*.<sup>9</sup> But *náà* does not strictly speaking mark definiteness. To see this,

<sup>8</sup>Manfredi (1992) claims that Yorùbá morphemes usually glossed as determiners, and (mis)translated as English definite articles, are both syntactically and semantically more like demonstrative adverbs or deictic nouns.

- (i) a. iwé e Ayò (náà)  
           book of at that very  
       b. iwé e Ayò (yẹn)  
           book of that-one  
       c. iwé e Ayò (yìí)  
           book of this-one (Manfredi 1992: 207)

<sup>9</sup> During the course of writing this chapter I had the privilege of speaking with native speakers of Yorùbá who are not linguists telling them how I got stuck interpreting nouns that take the element *náà* as in *ilé náà*. To my surprise, the first response I got from one of them is this: 'that is being specific'! This response is a



consider the examples in (42). In (42a), the first mention of *ọyà* indicates that it is a new referent that is neither familiar to the speaker nor the hearer. In this case, its interpretation is indefinite. In (42b) the mention of *ọyà* again shows that it is now a familiar referent both to the speaker and the hearer and here the bare noun is interpreted as definite. Finally in (42c), where the noun occurs with *nàà* the interpretation that *ọyà* ‘grass-cutter’ receives is that of identity with the previously mentioned *ọyà* ‘grass-cutter’.

- (42) a. Tàkúté Olú mú [ọyà] *indefinite*  
 trap O. hold grass-cutter  
 ‘Olu’s trap caught **a grass-cutter**.’
- b. Olú gbé [ọyà] lólé *definite*  
 O. carry grass-cutter go-house  
 ‘Olu carried **the grass-cutter** home.’
- c. [Ọyà *nàà*] ni wón fí jẹyán *definite salience*  
 grass-cutter SAL Foc 3pl use eat-pounded yam  
 ‘**The very grass cutter** served as meat with which they ate pounded yam.’

More generally, with nominal expressions that are unambiguously definite (e.g. proper names and nominal expressions that have demonstratives), I show that *nàà* may mark uniqueness, additivity or identity. Moreover, the availability of these construals is sensitive to the syntactic status of the argument as stated in (43).

- (43) The distribution of *nàà*  
 (i) *nàà* marks uniqueness or identity with focused arguments  
 (ii) *nàà* marks additivity or identity with non-focused arguments

The next two subsections show how these distinctions are realized.

### 5.2.2.1 *Nàà* marks uniqueness or identity with focused arguments

Like most Kwa languages such as Gungbe, Fongbe, Gengbe (Aboh 2004), focus constructions in Yorùbá are “utterances that involve a preconstructed domain...it can also be presupposed due to specific situational knowledge or even to general, may be culturally determined, background knowledge” (Bisang and Sonaiya 2000).

---

confirmation that many speakers of Yorùbá have the intuition that *nàà* marks nouns for definiteness/specificity. But from what I show in this section, we see that *nàà* does not also quite fit into the description of specificity as it is used in the literature, rather *nàà* marks nouns for “salience” in some way. In particular, I show that this notion of salience overlaps with specificity, it is not reducible to specificity.

They require leftward movement of the focused entity to sentence initial position and such entity is marked by the particle *ni* (Yusuf 1995).

Both nouns and proper names that are marked by *náà* can be focused irrespective of whether they are singular or plural. When this happens, the focused arguments are construed as unique ‘ONLY the X’ reading or as standing in an identity relation with a previously discourse referent ‘the VERY X’ reading. This is illustrated in (44) and (45) respectively.

(44) Singular NP in Focus position

a. *Context for uniqueness interpretation*

Ojo has a goat, a sheep and a tiger. One day, the tiger killed Ojo’s guard. Ojo’s son, who for the first time got to know how dangerous tigers are, ran to his father and said (44b). In response, the father said (44c).

- b. **Èkùn** ni ó pa ọḍẹ  
 tiger Foc 3sg kill hunter  
 ‘It is **the tiger** that killed the guard!’

- c. **Èkùn náà** ni ó le pa ọḍẹ.  
 tiger SAL Foc 3sg able kill guard  
 ‘**ONLY the tiger** can kill the guard.’

(45) a. *Context for identity interpretation*

It is a known fact to Kunle’s father that there is one particular tiger in the Ibadan zoo where Kunle works that is very dangerous. This morning there was a report that the tiger killed a guard. When Kunle’s father asked if it is the tiger that killed the guard. Kunle replied with (45b).

- b. **Èkùn náà** ni ó pa ọḍẹ.  
 tiger SAL Foc 3sg kill guard  
 ‘It is **the VERY** tiger that killed the guard.’

I extend the searchlight to coordinated nouns. Again, we see that focused arguments marked with *náà* are construed either as unique (46), or as standing in an identity relation (47).

(46) Plural NP in Focus position

a. *Context for uniqueness interpretation*

Imagine that the following animals are paired together in a hunting expedition: (i) *ajá* ‘dog’ and *ológbò* ‘cat’ (ii) *àgùtàn* ‘sheep’ and *ewúré* ‘goat’. At the end of the day, group (i) killed some game while group (ii)

killed nothing. Determining the potentiality of which group can hunt, Speaker A rendered (46b).

- b. [Ajá àti ológbò náà] ni ó le se ọdẹ..  
 dog and cat SAL Foc 3sg able do-hunting  
 ‘It is **ONLY the dog and the cat** that can hunt.’ *uniqueness*
- (47) a. *Context for identity interpretation*  
 Imagine that the following animals were paired together in a hunting expedition: (i) *ajá* ‘dog’ and *ológbò* ‘cat’ (ii) *àgùtàn* ‘sheep’ and *ewúré* ‘goat’. At the end of the day, group (i) killed a rabbit while group (ii) killed nothing. A week later the same contest was repeated and only group (i) still succeeded in killing some game, then speaker A rendered (48b).
- b. [Ajá àti ológbò náà] ni ó pa ẹran.  
 dog and cat SAL Foc 3sg kill animal  
 ‘It is **the VERY dog and cat** that killed a game.’

Since proper names are treated as definite DPs (Longbardi 1994), it is also predicted that they should pattern like other definite nouns when they are focused. This is what the examples in (48)-(51) show. The examples in (48) and (49) show individual proper names while (50) and (51) show coordinated names with *náà*.

- (48) Individual proper name in Focus position
- a. *Context for uniqueness*  
 Olu has threatened to kill Ojo’s dog. One day, the dog was reported dead. Ojo’s son who heard of Olu’s threat ran to his father and said (48b). In response, the father who also knows Olu to be a wicked person said (48c).
- b. **Olú** ni ó pa ajá.  
 O. Foc 3sg kill dog  
 ‘It is **Olú** that killed the dog.’
- c. **Olú náà** ni ó le pa ajá.  
 O. SAL Foc 3sg able kill dog  
 (i) = ‘It is **ONLY Olu** that could kill the dog.’  
 (ii) ≠ ‘It is **ALSO Olu** that could kill the dog.’
- (49) a. *Context for identity*  
 Olu hates dogs. Last week, he killed Ojo’s dog under the pretext that it ate his meat. Yesterday, another dog was killed and it was alleged that the same Olu was responsible. Speaker A who witnessed the killing said (49b).

- (b) **Olú náà ni ó pa ajá.**  
 O. SAL Foc 3sg kill dog  
 (i) =‘It is **the VERY Olu** that killed the dog.’  
 (ii) ≠‘It is **ALSO Olu** that killed the dog.’
- (50) Coordinated Proper names in Focus position
- a. *Context for uniqueness*  
 The following children are paired together for a dancing competition (i) *Kúnlé* and *Títí* (ii) *Túndé* and *Mojí*. At the end of the day, group (i) won the competition. Commenting on the result, Speaker A rendered (50b).
- b. **Kúnlé àti Títí náà ni ó le jó.**  
 K. and T. SAL Foc 3sg able dance  
 (i) =‘It is **ONLY Kunle and Titi** that can dance.’  
 (ii) ≠‘It is **ALSO Kunle and Titi** that can dance.’
- (51) a. *Context for identity*  
 A week later the same contest was repeated and the same group (i) won the competition, then speaker A rendered (51b).
- b. **Kúnlé àti Títí náà ni ó le jó.**  
 K. and T. SAL Foc 3sg able dance  
 (i) =‘It is **the VERY Kunle and Titi** that can dance.’  
 (ii) ≠‘It is **ALSO Kunle and Titi** that can dance.’

Thus, in focus position, nominal expressions that occur with *náà* are interpreted either as unique (ONLY X) or as identical to a previously mentioned referent (the VERY X). Crucially, the additive function of *náà* (ALSO X) is not found with focused elements.

### 5.2.2.2 *Náà* marks additivity or identity with (non-focused) arguments

Nouns and proper names can also be marked by *náà* in non-focused positions. When this happens, the non-focused arguments can be construed as added to the set of relevant discourse referents (ALSO X) or are construed as identical to a previously mentioned referent (the VERY X).

I first consider the **additive** reading. I split the relevant data into two. In (52)-(53) are the examples that show how the occurrence of *náà* with individual nouns and personal names gives rise to an additive interpretation.

- (52) Individual nouns in A-position
- (a) Out of fear that someone might steal her pets, my neighbour locked her dog and cat in the living room and went shopping. When she returned she

quickly looked for the cat and found it sleeping on the floor, but could not immediately see the dog. Looking around, she discovered that the dog too was lying on a couch. When I asked of the dog, she said (52b).

- b. **Ajá náà wà níbẹ̀.**  
 dog SAL be Loc-there  
 ‘**The dog ALSO** is there.’

(53) Individual Personal name in A-position

- a. My wife left Taye and Kehinde with our neighbour and went shopping. On her return she called on Taye from the gate and he answered. Calling Kehinde, she received no answer. She asked me if he had left our neighbour’s place and I said (53b) because I just heard his voice within an earshot.
- b. **Kẹ̀hòndā náà wà níbẹ̀!**  
 K. SAL be Loc-there  
 ‘**Kehinde ALSO** is there.’

Similarly, in (54)-55) are the examples showing the co-occurrence of coordinated nouns and personal names with the same salient element giving us the additive interpretation.

(54) Coordinated nouns in A-position

- a. My domestic animals: a dog, a cat, a goat and a sheep are never found outside after 6pm. By 7pm this evening, my son came to inform me that my goat and sheep were in the backyard. To my disbelief, I followed him to the backyard. When we got there, truly the goat and the sheep were there. Looking further, he saw some other animals and said (54b).
- b. **Ajá àti ológbò náà wà níta**  
 dog and cat SAL be Loc-outside  
 ‘**The dog and the cat ALSO** are also outside.’

(55) Coordinated personal names in A-position

- a. Bose ran into the house from the backyard and told me that some people were abusing her because she was playing with her brothers. I asked her to point at them. First, she pointed at Titi and Moji. When I asked of the other people, she said (55b).
- b. **Olú àti Kúnlé náà wà níbẹ̀.**  
 O. and K. SAL be Loc-there  
 ‘**Olu and Kunle ALSO** are there.’

I discuss the **identity** interpretation next beginning with the example of an individual noun (56) and an individual personal name (57). The identity interpretation is obtained for both of them, which implies that such nominal expressions have been previously mentioned in the discourse.

(56) Individual noun in A-position

- a. My son told me there was a dog in the backyard that stared at him as he was entering through the gate. When we got there the dog was still there and my son said (56b).

- b. Bàbá, **ajá náà** wà níbè..  
father, dog SAL be Loc-there  
'Father, **the VERY dog** is there.'

(57) Individual personal name in A-position

- a. My son told me that one man named Olu who he has just pursued for stealing his money was in the backyard staring at him. By the time my son led us there, he was still there and my son said (57b).

- b. È wò ó **Olú náà** wà níbè..  
2pl look 3sg O. SAL be Loc-there  
'Look, **the VERY Olu** is there.'

In (58)-(59) are the coordinated nouns and personal names. Like their individual counterparts, when they take the salient element *náà*, both the identity and additive interpretations can be obtained but I only illustrate the former with the example in (58).

(58) Coordinated nouns in A-position

- a. Ládi told me that a dog and a cat were in the backyard starring at him as he entered. When we got there they were still there and he said (58b).

- b. **Ajá àti ológbò náà** wà níbè..  
dog and cat SAL be Loc-there  
'**The VERY dog and cat** are there.'

(59) Coordinated personal names in A-position

- a. Olu and Kunle are naughty boys. Few minutes ago, Omóle came and told me the two were in the backyard throwing pebbles at him. When we got there, they were still there and he said (59b).

- b. **Olú àti Kúnlé nàà** wà níbè.  
 O. and K. Sal be Loc-there  
 ‘The **VERY Olu and Kunle** are there.’

The conclusion that I draw from the data presented here is that non-focus arguments marked with *nàà* are construed either as additive (the ALSO X reading) or as standing in an identity relation to a previously mentioned referent (the VERY X reading). Notably, non-focused arguments are never construed as unique (the ONLY X reading).

The table below shows the overall summary of N *nàà* in both focus and non-focus constructions.

(60) *N nàà in focus and non-focus domains*

| N <i>nàà</i>        | FOCUS POSITION | NON-FOCUS POSITION |
|---------------------|----------------|--------------------|
| UNIQUENESS FUNCTION | √              |                    |
| IDENTITY FUNCTION   | √              | √                  |
| ADDITIVE FUNCTION   |                | √                  |

### 5.2.3 Testing for salience

The goal of this section is to demonstrate that salient nominals can’t be indefinite but they can be “free choice” (defined below). I use two diagnostics to establish this claim.

#### 5.2.3.1 Yorùbá salient nominals can’t be indefinite

Relevant to the present discussion is the fact that Yorùbá bare nouns can be either indefinite or definite. The salient marker *nàà* predictably should not co-occur with indefinite NPs because they are not discourse-linked nouns. However, at the surface level, it is difficult to tell which bare nouns are definite and which ones are indefinite. The question that arises is the following: how do we know that truly, indefinite nouns cannot take *nàà*? One way to test this is by finding unambiguous indefinite nouns to combine with *nàà*. The readily available nouns are the negative polarity items (NPI) i.e. the “N-kí-N” derived nominals (Koch 2004). On independent grounds, Koch claims that Yorùbá negative polarity items such as *ẹnikéni* in (61) are existentials and as such are indefinites.

- (61) Kò dájú pé ẹnikéni wà níbi  
 NEG certain that person.kí.person be in.here  
 ‘I am not certain that **anyone** is here.’ (Koch 2004:3)

If negative polarity items in general, and *enikéni* in particular, are indefinites, then we expect that their co-occurrence with *náà* should be bad. This prediction is supported by the ungrammaticality of (62b) where we see that *náà* cannot occur with *enikéni*.

- (62) a. *Enikéni*      *ló*                      *le*      *wọbẹ*                      *focus*  
 anyone      Foc-3sg                      able      enter-there  
*yàrá tí*      *kò*      *nílẹ̀kùn*<sup>10</sup>  
 room that      Neg      have-door  
 'It is **anyone** that can enter a room without a door.'
- b. \**Enikéni*      ***náà***      *ló*                      *le*      *wọbẹ*  
 anyone      SAL Foc-3sg                      able      enter-place  
*yàrá tí*      *kò*      *nílẹ̀kùn*  
 room that      Neg      have-door

I extend the search to three other syntactic environments, including negation (63), conditionals (64) and Yes-no questions, (65). In all of these contexts, the co-occurrence of *náà* with the indefinite *enikéni* 'anyone' yields ungrammaticality as shown in the (b) examples of (63-65).

- (63) a. *Enikéni*      *kò*      *sí*      *nílẹ̀.*                      *negation*  
 anyone      neg      be      at-home  
 'No one is at home.'
- b. \**Enikéni*      ***náà***      *kò*      *sí*      *nílẹ̀.*  
 Anyone      SAL      neg      be      at-home
- (64) a. *Tí enikéni*      *bá*      *pẹ*      *sọ*      *fún mí.*                      *conditional*  
 if anyone      Aux      call tell      for 1sg  
 'If **anyone** calls, tell me'
- b. \**Tí enikéni*      ***náà***      *bá*      *pẹ*      *sọ*      *fún mí.*  
 if anyone      SAL      Aux      call tell      for 1sg
- (65) a. *Nje o rí enikéni*                      *Yes-no Q*  
 Q-tag 2sg see anyone  
 'Do you see **anyone**?'

<sup>10</sup> This saying is very famous among the *eégun alárinjọ* (*elẹwẹ*) 'traveling dancers'. It is contained in one of the songs that are used to compare a lady who is not attached to any man to a room that has no door. As such, any man can ask for her hand in love.



- b. Nje o rí ẹnikẹni náà  
Q-tag 2sg see anyone SAL

The fact that salient marking is not possible with *ẹnikẹni* is consistent with Koch's claim that it is a polarity item. But as I show in the next subsection, when *ẹnikẹni* occurs in a free choice environment it can occur with *náà*.

### 5.2.3.2 Yorùbá salient nominals can be “free choice”

Drawing from Shank (2004: 70-72), I define free choice items as indefinite NPs whose domain has been widened.<sup>11</sup> When these items are in a focus construction, the contextually supplied domain, which restricts a negative polarity indefinite NP, can be widened. In this section, one case involving domain widening is considered for *ẹnikẹni*, and I argue that the fact that *náà* can co-occur with this item is due to the widening of its domain. By so doing, a possible scalar implicature is canceled. Specifically, whenever *náà* co-occurs with *ẹnikẹni*, its interpretation is no longer limited to “anyone”. Rather, it has been widened to include “anybody at all”.

- (66) a. Context: Okóya, a business mogul is throwing a party to mark his 60<sup>th</sup> birthday. Títí, who is a friend to one of his daughters to her disbelief, heard that the party is open. She went to her friend and asked (66b). Then, her friend replied with (66c).

- b. Sé òótó ni pé ẹnikẹni náà ni  
Q true be C anyone SAL Foc  
ó le wá sí patí ọjó-ìbí dádì.  
3sg able come Loc party day-birth daddy  
'Is it true that it is **anybody at all** that can attend daddy's birthday party?'
- c. Òótó ni, ẹnikẹni náà ni ó le wá  
true be anyone SAL Foc 3sg able come  
'It is true, **anybody at all** can attend.'

In this context, *ẹnikẹni* has a free choice reading. With this I conclude my discussion reiterating the claim that the distribution of *náà* is semantically conditioned: it never co-occurs with indefinite non-specifics (e.g. someone/anyone), but when its domain is widened, it can have a free choice reading that enables it to be construed as “anybody at all”.

<sup>11</sup>For details on definition of “free choice”, see also among others Haspelmath (1997) and Giannakidou (1998).

### 5.2.3.3 No dedicated marking for salience in English

I have shown that Yorùbá has a dedicated word that marks salience on nouns. This is the element *náà*. This element is capable of marking nouns for uniqueness, additivity, or identity. In this section, I show that just as English does not overtly mark specificity on definite DPs, so it is with salience: English does not have dedicated words to mark nouns as salient. In this case, a definite DP is also considered as salient (Heim 1982). This fact is illustrated in (66). The claim is that *the man* can either be specific (66b) or salient (66c). Although, there is no distinct morpheme used in English to mark salience, as mentioned above, salience can be marked prosodically by means of an intonational prominence of the determiner.

- (67)
- |    |                                      |                   |
|----|--------------------------------------|-------------------|
| a. | [A man] came in.                     |                   |
| b. | [The man] sat down.                  | definite specific |
| c. | [ <b>THE</b> man] was John's father. | definite salience |

As we have seen in the translation of the various Yorùbá examples, English does have lexical items that perform the functions of uniqueness, additivity and identity, namely *only*, *also* and *very*.<sup>12</sup>

- (68)
- |    |                               |                   |
|----|-------------------------------|-------------------|
| a. | <b>Only</b> the man sat down. | <i>uniqueness</i> |
| b. | The man <b>also</b> sat down. | <i>additivity</i> |
| c. | The <b>very</b> man sat down. | <i>Identity</i>   |

In conclusion, while Yorùbá marks uniqueness, identity, and additive with *náà*, In English, different items fulfill these functions.

### 5.2.4 *Náà* combines with other functional elements within the DP

The salient marker *náà* can also co-occur with either the specificity marker *kan* or demonstratives. I also show that *náà*, *kan* and demonstratives *yìí/yẹn* can all co-occur with a definite DP in certain ways. First, when *kan* co-occurs with *náà* in focus construction, the definite construal of the DP is maintained and in addition such DP is marked as standing in an identity relation to a previously mentioned referent that is unique. Of particular interest is the fusion of identity and uniqueness interpretation. I present the full data set in (69)-(71).

<sup>12</sup>From the foregoing, it is clear that English marks nouns for salience optionally. Worthy of note is that English does not have dedicated word for salience. Those words identified as capable of marking salience can also be used for other functions. For example 'very' can also function as a degree adjective.

- (i)
- |    |                                  |
|----|----------------------------------|
| a. | I like the lady                  |
| b. | I like the lady <b>very</b> much |

(69) [NP SPF SAL] *in focus position*

**Ajá** **kan** **náà** ni mo rí  
dog SPF SAL FOC 1sg see

(i) = 'It is **the VERY SAME dog** that I saw.'

*Identity/unique*

(ii) ≠ 'It is the dog TOO that I saw.'

*\*Additive*

The next set of examples shows how demonstratives combine with the salient marker. Observe that the linear order is Demonstrative-Salience.

(70) [NP Dem Sal] *in focus position*

**Ajá** **yíí** **náà** ni mo rí  
dog DEM SAL FOC 1sg see

(i) = 'It is **THIS VERY dog** that I saw.'

*Identity/unique*

(ii) ≠ 'It is this dog TOO that I saw.'

*\*Additive*

And when all the three elements: demonstrative, specificity and salient markers combine to mark a DP, the linear order is Demonstrative-Specificity-Salience and the DP is marked as standing in an identity relation to a previously mentioned referent that is also unique. This is shown in (71).

(71) [NP DEM SPF SAL] *in focus position*

[**Ajá** **yíí** **kan** **náà**] ni mo rí  
dog Dem SPF sal FOC 1sg see

(i) = 'It is **THIS VERY SAME dog** that I saw.'

*Identity/unique*

(ii) ≠ 'It is ALSO this certain dog that I saw.'

*\*Additive*

The examples in (72)-(74) illustrate the occurrence of these same elements in the same combination with bare nouns in non-focus position. Like the focused construction, both identity and uniqueness readings are obtained. When nouns co-occur with the salient and specificity markers (72), or with the specificity marker, the salient marker, and a demonstrative (74), such nouns are marked as standing in identical relation to a previously mentioned referent that is unique. In contrast, when a noun co-occurs with the salient marker and a demonstrative (73), such noun is marked as standing in identical relation to a previously mentioned referent and at the same time marked for additivity.

(72) [NP SPF SAL] *in non-focus position*

Mo rí ajá **kan** **náà**  
1sg see dog SPF SAL

(i) = 'I saw **the VERY SAME dog**.'

*Identity/unique*

(ii) ≠ 'I saw certain dog TOO.'

*\*Additive*

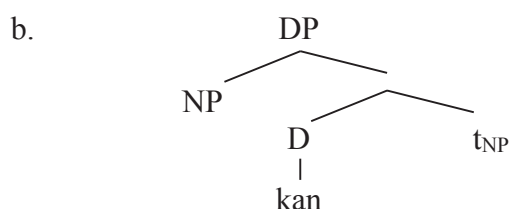


identity reading. The reason as to why this comes to be so is subject to further research. I now turn to the syntax of these two elements in §5.3.

### 5.3 The syntax of *kan* and *náà*

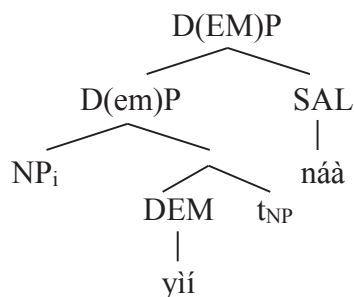
Having shown the distribution and the semantics of *kan* and *náà*, I now give a syntactic account. I have shown that indefinite NPs are morphologically marked for specificity with *kan*. I analyze *kan* as D and propose the structure in (76) where the NP starts as a complement of D and moves to Spec DP to derive the surface linear order of [NP D].

(76) a.  $[_{DP} NP_i [_{D} kan] t_i]$



On the other hand, I propose that *náà* as a marker of salience modifies D(em)Ps and is to be analyzed as an adjunct to D(em)P with the structure in (77).

(77) a.  $[_{D(em)P} NP [_{D(EM)} yìí ] t_i] náà$



As the structure in (77) shows, it is possible for the salient marker *náà* to mark the entire DP as salient or the functional element within the DP in this case, *yìí* ‘this’, since it is in c-command relation to the entire DP.<sup>13</sup> I assume the former, namely

<sup>13</sup>Viewing *náà* as a modifier of functional structure has cross-linguistic support. The intuition of native speakers of English is that in the phrase [even this book], the nuclear stress (association with focus effect) is on [this] not on [book]. [Book] is anaphoric, so somehow it escapes from the scope of the focus modifier [even].



- 
- b.      Mo      lé      [àwọn ìjímèrè]      náà]]  
          1sg    greet   PL    red-monkey    SAL  
          ‘I chased **the very red monkeys.**’

(80b) indicates that the salient marker is pragmatically singular rather than inherently singular.

### 5.5 Conclusion

I have shown how specificity and salience readings are obtained in Yorùbá nominal expressions. I argued that an indefinite NP that is morphologically marked for specificity with *kan* has the interpretation of ‘a certain N’, whereas a definite DP that is morphologically marked for salience with *náà* can mean ‘the VERY N’, ‘ONLY N’ or ‘ALSO N’. I also showed that though salience is not compatible with indefiniteness, in free choice cases, the salient marker *náà* could combine with indefinite NPs whose domain had been widened, yielding an ‘anybody at all’ reading. Syntactically, I claimed that *kan* is a deictic D whereas *náà* can modify a functional head, such as D(em) and it is analyzed as an adjunct to the DP.





## Chapter 6

### Plural Strategies in Yorùbá

---

#### 6 Introduction

The concern of this chapter is to account for how plural marking is carried out on Yorùbá nominal expressions. I have identified three strategies (cf. Ajíbóyè 2005c). First is the contextually determined plurality, as in (1). The term “contextually determined plurality” is intended to capture the fact that, in the absence of a PLURAL feature, the interpretation of a nominal expression as singular or plural is contextually determined. This is the focus of §6.1.

- (1)    Mojí    rí        [ejò]    lónà        oko  
         M.    see    snake on-path    farm  
         (i)    ‘Mojì saw a **snake** on her way to farm.’  
         (ii)   ‘Mojì saw **snakes** on her way to farm.’

The second plural-marking strategy is semantically determined, as in (2). The term “semantically determined plurality” is intended to capture the fact that certain lexical items, by virtue of their inherent semantics are necessarily construed as plural. In Yorùbá, this is the case for group-denoting quantifiers and for numerals whose cardinality is two or greater than two. I account for this in §6.2.

- (2)    a.        Mo    ra        [ìwé    púpò]  
                1sg    buy    book    many  
                ‘I bought **many books**.’  
                b.        Mo    ra        ìwé    méjì  
                1sg    buy    book    two  
                ‘I bought two **books**.’

The third strategy is morphologically determined plurality, as in (3). The term “morphologically determined plurality” is intended to capture the fact that certain morphemes have an exclusively plural function, i.e., they mark plurality and nothing else. In Yorùbá, there are three kinds of plural morphemes: the plural marker *àwọn* that occurs before nouns, the plural prefix *-wọn* that attaches to demonstratives, the

plural copy morpheme that copies modifiers to indicate plurality on the NP.<sup>14</sup> I account for this in §6.3.

- (3) a. Mo kí àwọn ọkùnrin  
 1sg greet PL man  
 ‘I greeted **men**.’
- b. Mo rí [ájá wọn-yìí]  
 1sg see dog PL-DEM  
 ‘I saw these **dogs**.’
- c. Yorùbákò ní [àsà burúkú burúkú]  
 Y. Neg have custom COPY bad  
 ‘Yoruba does not have bad **customs**.’

I propose that plurality is associated with two syntactic positions. One is with nouns, the other with non-nouns. I also demonstrate that Yorùbá plural words are left adjoined to the nouns/non-nouns that they mark for plural.

### 6.1 Contextually determined plurality

The first observation is that if a noun occurs by itself or with a modifier, there is no way to know if that noun is to be interpreted as singular or plural.

- (4) a. Mojí rí [ejò] lònà oko  
 M. see snake on-path farm  
 (i) ‘Mojí saw a snake on her way to farm.’  
 (ii) ‘Mojí saw snakes on her way to farm.’
- b. Mojí rí [ejò dúdú] lònà oko  
 M. see snake black on-path farm  
 (i) ‘Mojí saw a black snake on her way to farm.’  
 (ii) ‘Mojí saw black snakes on her way to farm.’

I show that the interpretation of such nominal expressions as singular or plural in Yorùbá is partly contextually determined. I claim that this is an instance of General number.

<sup>14</sup>Strictly speaking, both semantically determined plurality and morphologically determined plurality involve the semantic feature [PLURAL]. The distinction lies in the fact that plural quantifiers introduce a [PLURAL] feature by virtue of their group denoting semantics, while plural morphemes introduce a [PLURAL] feature and nothing else.

### 6.1.1 The General number analysis

The idea of General number adopted here follows Rullmann and You (2003) and Rullmann (2004). On the basis of the semantic and pragmatic properties of bare nouns, they conclude that bare nouns are neither singular nor plural; i.e., they are unspecified for number (cf. Déprez 2004: 10). In order to determine whether a singular or a plural interpretation will be applicable, one has to put such bare nouns in a sentence. Rullmann and You claim that the example in (5), which has general number, has the same truth conditions as (6) which has a semantically singular object (p. 2).

- (5) Zuotian        wo        mai        le        **shu**  
 yesterday        I        buy        ASP    book  
 ‘Yesterday, I bought one or more books.’ (Rullmann and You 2003: 1)
- (6) Zuotian        wo        mai        (yi)        **ben**        **shu**  
 yesterday        I        buy        one        CL        book  
 ‘Yesterday, I bought a/one book.’ (Rullmann and You 2003: 2)

The next two subsections examine count and mass nouns in Yorùbá and show that both categories behave the same way with respect to the general number property.

There are two distinctive ways by which nouns that are unspecified for number in Yorùbá can be interpreted. On the one hand, there are nouns that are not specified for number and as such they can be interpreted as singular or plural. I treat this type in §6.1.2. On the other hand, there are nouns that are not specified for number and they can only be interpreted as singular. I treat this in §6.1.3.

### 6.1.2 Unspecified for number resulting in ambiguity

When a count noun occurs by itself or when it takes a modifier, it can either be construed as singular or plural. In (7a) *ejò* ‘snake’ occurs independently and as shown in interpretation (i), it can refer to one snake. But it can also be the case that the snake is more than one, as in interpretation (ii). Similarly, in (7b) where *ejò* ‘snake’ takes the modifier *dúdú* ‘black’, it can either be construed as singular or plural.

- (7) a.        Mojí    rí        [ejò]    lónà    oko  
          M.    see    snake on-path        farm  
          (i)    ‘Mojí saw a snake on her way to farm.’  
          (ii)   ‘Mojí saw snakes on her way to farm.’

- b. Mojó rí [ejò dúdú] lónà oko  
 M. see snake black on-path farm  
 (i) 'Moji saw a black snake on her way to farm.'  
 (ii) 'Moji saw black snakes on her way to farm.'

Like count nouns, bare mass nouns can also be interpreted as singular or plural depending on context. In (8a), *mílùkì* 'milk' can be interpreted as singular or plural. It can also be interpreted as a quantity. Similarly, when it takes a modifier as in (8b) the same two interpretations of singular and plural are obtained.

- (8) a. Mo ra [mílùkì] *singular/plural*  
 1sg buy milk  
 = 'I bought a tin/carton of milk.'  
 = 'I bought some tins/cartons of milk.'
- b. Mo ra [mílùkì gbẹ̀rẹ̀fu] *singular/plural*  
 1sg buy milk powdered  
 = 'I bought a tin/sachet of powdered milk.'  
 = 'I bought some tins/sachets of powdered milk.'

Since Yorùbá nouns can be unspecified for number, this suggests that number marking is underdetermined in Yorùbá.

Based on the data and the discussion above I propose the structure in (9) for Yorùbá bare nouns and claim that if an NP is unmarked for plural, then the NP can be interpreted as singular or plural.

- (9) a. NP  
 △  
 ejò  
 'snake(s)'
- b. NP  
 / \  
 NP Mod  
 | |  
 ejò dúdú  
 'black snake(s)'

As a result of being unspecified for number, the interpretation of such an NP as singular or plural is contextually determined. The example in (10) shows a context where *ajá* 'dog' can be interpreted as singular.

(10)a. Context for singular interpretation: I was walking on a path to my house at night and a dog appeared from nowhere. When I got home, I say (10b) to my wife.

- b. Mo      rí      **ajá**      lójú      ònà      ilé  
       1sg    see    dog    on    road    house  
       ‘I saw **a dog** on my way home.’

On the other hand, the example in (11) shows a context where *ajá* ‘dog’ can be interpreted as plural. In *Şaworoidę* movie, Adębòmí was telling a story of a hunter and his dogs to his wife and child.<sup>15</sup>

(11) a. Context for plural interpretation: The hunter in the story uses songs to summon his dogs in times of danger. The dogs then would run quickly to his aid.

- b. **Ajá**    a        mi        dà        o  
       dog    MTM   1sg    Q-tag   Emph  
       ‘Where are my dogs?’
- c. Ajá    ọde  
       dog   hunter  
       ‘the hunting dogs’
- d. òkémọkéréwú..., ọsopàkàgbómọmì..., ọgbálẹgbàràwé
- e. Ajá    ọde  
       dog   hunter  
       ‘the hunting dogs’
- f. Ẹ        sáré    ẹ        mí-a    bọ        o  
       2pl    run    2pl    Prog    come   Emph  
       ‘You should all come immediately.’

The mention of òkémọkéréwú, ọsopàkàgbómọmì, and ọgbálẹgbàràwé in this song even before (11f) is uttered leaves no one in doubt that *ajá* ‘dog’ can only be interpreted as plural.

Crucially, Yorùbá differs from some other languages where the expression of plurality is inflectional. In such languages, plural marking is obligatorily expressed via a dedicated plural morpheme. Consider the English examples in (12). Adding the plural suffix ‘s to ‘dog’ differentiates between the singular interpretation (12a) and the plural interpretation (12b).

<sup>15</sup> *Şaworoidę* is one of the most famous Nigeria home video movies written by Professor Akínwùnmí, produced in (1999) by the *Mainframe Film Production* under its director, Tùndé Kẹlání.

- (12) a. I saw a **dog** on my way home.’ *singular*  
 b. I saw **dog-s** at the Vancouver city hall today.’ *plural*

I conclude along the lines of Corbett (2000) that the issue of ambiguity of number interpretation of nouns as singular or plural is one of the peculiarities of languages with no overt dedicated plural marking.<sup>16</sup> The next section addresses the other case of the unmarked nouns that are unambiguously interpreted as singular.

### 6.1.3 Unspecified for number with obligatory singular interpretation

The other context where bare nouns are not specified for number is when they co-occur with a demonstrative (13a) or the numeral “one” (13b). In this context, the noun is obligatorily interpreted as singular.<sup>17</sup>

- (13) a. Mo    rí    [ajá    yù]            N    DEM  
           1sg   see   dog   DEM  
           ‘I saw this dog.’
- b. Mo    rí    [ajá    kan]            N    NUM=1  
           1sg   see   dog   one  
           ‘I saw one dog.’

The obligatory interpretation of nouns as singular whenever they take demonstratives being reported here is a little surprising. Recall that when a noun occurs by itself, it can be interpreted as either singular or plural. One wonders while taking a demonstrative will make a noun to be obligatorily singular. In light of this, I assume that demonstratives in Yorùbá are inherently singular, and therefore, force nouns they occur with to have an obligatory singular interpretation.<sup>18</sup> This claim is further discussed in §6.3 where demonstratives are marked for plural.

To recap, we have seen that a noun that is not specified for number can be interpreted as singular or plural if it occurs by itself or if it takes a modifier. On the

<sup>16</sup> Matthewson (personal communication) notes that Brazilian Portuguese has number-neutral bare nouns and has a real plural marker.

<sup>17</sup> Note that the Demonstrative follows N. I assume that a demonstrative is a functional head that takes an NP as its complement. Further, I assume that Yorùbá is a Head initial language. So, in cases where the head follows the complement in the surface syntax, I account for this via movement. In this case, the NP moves to Spec Dem (cf. Kayne 1994).

<sup>18</sup> This reminds us of the behaviour of *náà*, the salient marker discussed in Chapter 5 where the interpretation of a salient noun as singular is pragmatically determined. There is probably more to know of these elements than presently revealed.

other hand, if the noun occurs with an inherently singular numeral (“one”) or a demonstrative, that noun is obligatorily interpreted as singular.

## 6.2 Semantically determined plurality

One means by which NPs are unambiguously expressed as plural in Yorùbá is when they occur with group-denoting expression that is inherently plural. The lexical items that are inherently plural in Yorùbá nominal expressions are quantifiers and numerals. This is in contrast with Chierchia’s (2005:8) claim that quantifiers generally lack inherent number feature. Rather they receive this through agreement. As I show in this section, Yorùbá quantifiers are inherently plural and this is why whenever they combine with nouns which are unspecified for number such nouns are obligatorily interpreted as plural.

- (14) a. Mo ra [ìwé púpò]  
           1sg buy book many  
           ‘I bought **many books**.’
- b. Mo ra [ìwé méjì]  
           1sg buy book two  
           ‘I bought two **books**.’

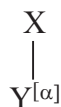
These quantifiers and numerals have an abstract [PLURAL] feature, which can be realized on nouns that they co-occur with. I call this an instance of semantically determined plurality. I propose that the plural interpretation of such nouns is accounted for through a feature percolation mechanism. The formulation of this mechanism is the subject of the next section.

### 6.2.1 The feature percolation analysis

There are two mechanisms of plural marking that I consider: feature percolation and feature matching. I start by giving a general view of the feature percolation mechanism before coming to the plural feature percolation in particular. I formulate the notion of percolation in the sense of copying where the copied feature is  $\alpha$ , as outlined in (15).

- (15) a. Node X immediately dominates node Y
- $$\begin{array}{c} X \\ | \\ Y \end{array}$$

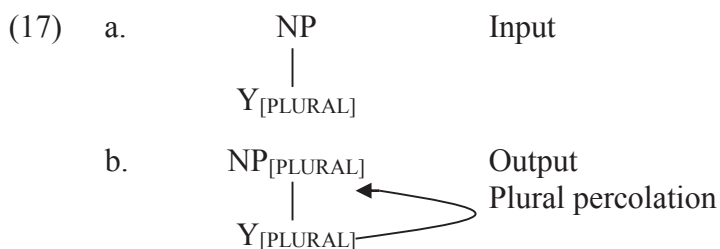
- b. Y is specified for the feature  $\alpha$ , X is unmarked for the feature  $\alpha$



- c. The feature  $\alpha$  is copied on to X



I develop the idea of how plural feature percolation works with Yorùbá nominal expressions by proposing that there is an element labeled Y, which carries a [PLURAL] feature. The NP that is to be pluralized dominates this element. The basic assumption is that plural feature percolation copies the plural feature of a node onto the node that immediately dominates it, as in (17).



As we shall see, it is possible for percolation to come from more than one node within a nominal expression, thus percolation can be multi-directional.

The mechanism of feature percolation is not new in the literature. In its broad use as a well-formedness condition, Selkirk (1982) and Scalise (1984) define percolation as follows:

- (19) If a constituent  $\alpha$  is the head of a constituent  $\beta$ ,  $\alpha$  and  $\beta$  are associated with an identical set of features (syntactic or diacritic) (Selkirk 1982: 21)

In the same spirit, Owólabí (1995:106) claims that percolation is a device which enables a complex word to inherit the syntactic properties (or features) of its head. This implies that feature copying is usually from the head. These percolation approaches differ from the present analysis in one respect. In my own proposal, what makes an NP plural does not rely on the head alone. In particular, a plural feature of an adjunct can percolate onto the NP if the head noun is not specified for plural.

Further, the general formulation of feature percolation in (15) can apply to a



wide range of domains in the grammar of any language. This depends on the target of copying as well as what is copied. When a feature  $\alpha$  is copied in Phonology (e.g. under Optimality theory), the process is called reduplication, as in (20a). This process can manifest itself as feature spreading or assimilation, where phonological features are spelled-out at the level of pronunciation (PF). At the syntactic level,  $\text{COPY}\alpha$  is a syntactic feature, (20b). This is carried out through movement. In the minimalist theory, this copying process involves movement of a phrase. In this approach, the base is deleted after movement has taken place. This is called “copy” and “erase” (Chomsky 1993, 1995) and it manifests itself in the linear order of lexical items. Lastly in semantics, a semantic feature that is copied is manifested in meaning, (20c).

(20) *COPY in three domains of grammar*

|                  |   | Feature                         | Process                               | Target                        | Output                |
|------------------|---|---------------------------------|---------------------------------------|-------------------------------|-----------------------|
| COPY<br>$\alpha$ | a | $\alpha$ = phonological feature | “reduplication”<br>local, no deletion | [x] [x]<br>segments           | pronunciation<br>(PF) |
|                  | b | $\alpha$ = syntactic feature    | “movement”<br>non-local,<br>deletion  | [x] <del>[x]</del><br>phrases | linear order          |
|                  | c | $\alpha$ = semantic feature     | “percolation”<br>local, no deletion   | [x] [x]<br>features           | Meaning<br>(LF)       |

Closely linked to feature percolation is feature matching which is more restrictive than feature percolation in the sense that all members of a nominal expression within the phrase must agree with respect to the plural feature. Feature matching contrasts with feature percolation; in the latter the requirement is that at least one member of the phrase has the plural feature. I discuss the formulation of feature matching mechanism in §6.3.5.

Finally, in the account of the plural strategies across languages, I propose (21).

(21) *Plural marking*

Plural is resolved through feature-matching if possible, elsewhere through feature-percolation.

I am assuming that Yorùbá always uses the elsewhere condition i.e., the feature percolation mechanism.

Having laid out the mechanism that is involved in accounting for plural

marking, I now turn to the two types of semantically driven plural marking in Yorùbá.

### 6.2.2 Inherently plural Quantifiers

There are three quantifiers that force a plural construal on NPs in Yorùbá. These are *púpò*<sup>19</sup> ‘many’, *díẹ* ‘few’ and *gbogbo* ‘all’. In (22), where the only element in the nominal expression apart from the bare N is the quantifier, we observe that the whole NP is construed as plural.<sup>20</sup>

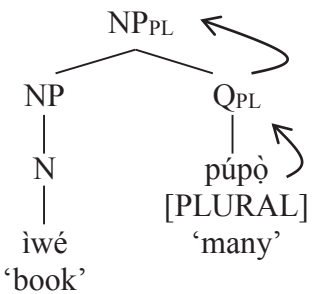
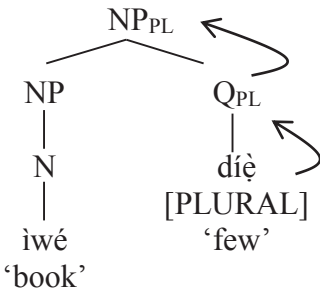
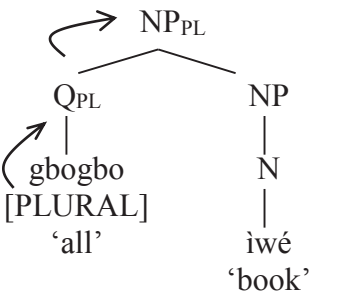
- (22) a. Mo ra [ìwé **púpò**] NP Q  
 1sg buy book many  
 ‘I bought many books.’
- b. Mo ra [ìwé **díẹ**] NP Q  
 1sg buy book few  
 ‘I bought few books.’
- c. Mo ra **gbogbo** ìwé Q NP  
 1sg buy all book  
 ‘I bought all (the) books’

The task here is to account for the obligatory plural construal of the noun with these quantifiers. The data in (22) suggest that there is an abstract [PLURAL] feature on quantifiers that forces the plural interpretation on NPs. Using the feature percolation mechanism, I propose that the abstract [PLURAL] feature of the quantifier percolates onto the NP as illustrated in (23).

<sup>19</sup> Lawal (1986, 1989) and Adéwólé (1989) claim that *púpò* is derived from the verb *p<sup>TM</sup>* ‘be plenty’. Two other words that are derived from the same word are *òpò* and *òpòlòpò*, both of which mean ‘many/plenty’.

<sup>20</sup>The syntactic position of *gbogbo* in relation to *púpò* ‘many’, and *díẹ* ‘few’ is not clear at the moment except to stipulate that while *gbogbo*, a universal quantifier precedes the NP, *púpò* ‘many’ and *díẹ* ‘few’ follow the NP. Note also that the Plural morpheme *gbogbo* can co-occur with *àwọn*. When this happens, *gbogbo* precedes, *àwọn*.

- (i) a. Gbogbo àwọn ọmọ ọ́n dé  
 all PL child HTM arrive  
 ‘All the children have arrived.’
- b. \*Àwọn gbogbo ọmọ ọ́n dé  
 PL all child HTM arrive

- (23) a. 
- b. 
- c. 

Evidence from French supports the claim that quantifiers are inherently plural. The word *plusieurs*<sup>21</sup> ‘many’ combines only with a plural noun. Compare (24a) where the noun is plural with (24b) where it combines with a singular noun. For the latter, it results in ungrammaticality.

- (24) a. plusieurs chevaux  
many horse.PL  
‘many horses’
- b. \*plusieurs cheval  
many horse.sg  
‘many horse’

So, the fact that I establish here is that *plusieurs* is like Yorùbá *púpò* in the sense

<sup>21</sup> One should not mistake the ‘s’ at the end of this quantifier to mean a plural morpheme.

that it only occurs with plural nouns.

In English, the quantifiers ‘many’ and ‘few’ among other quantifiers are also inherently plural. Compare (25a) where ‘many’ combines with a plural noun with (25b) where it fails to combine with a singular noun.<sup>22</sup>

- (25) a. many orange-s  
b. \*many orange

With this, I conclude that like French *plusieurs*, and English *many*, the Yorùbá quantifiers *púpò* ‘many’, *díè* ‘few’, and *gbogbo* ‘all’, are inherently plural. As such, they pluralize the NP they occur in through feature percolation. However, in a language like English, there must be an agreement between the noun and the quantifier with respect to the plural feature.

### 6.2.3 Inherently plural numerals

Another source of plural marking on Yorùbá NPs comes from numerals. This should not come as a surprise, as any noun that takes a numeral denoting a set with cardinality  $/>1/$  should be able to have a plural interpretation in any language (Corbett 2000: 211). This is why Ionin and Matushansky (2004) claim that the semantics of numerals is the same cross-linguistically. According to them numerals always signify plural (cf. Chierchia 2005). First, I claim that numerals apart from ‘one’ all bear an abstract plural feature that enable us to interpret the noun they co-occur with as plural. I later show that English numerals predictably contrast with Yorùbá in the sense that there must always be agreement between the noun and its constituents in English. Such agreement is not required in Yorùbá. I argue that this is because the two languages adopt different strategies for plural marking. While Yorùbá adopts feature percolation, English adopts feature matching.

Let us now go into details on how numerals acquire plural marking status. First, observe that Yorùbá numerals have different forms (Abraham 1958, Bámgbósé 1967, Awóbùlúyì 1978, Ajíbóyè & Déchaine 2004). Ajíbóyè & Déchaine discuss

<sup>22</sup> Although, the quantifier ‘many’ is supposedly inherently plural, the phrase: [a man] may occur with this quantifier in certain restricted contexts.

- (i) a. During the 1930s [many [a man]] sold his farm and moved west.  
b. During the 1930s [many men] sold their farms and moved west  
c. \*many man

Observe also the parallel situation in other English quantifiers: ‘every’ versus ‘all’. Both denote groups. While ‘all’ takes a plural NP, ‘every’ takes the unmarked form.

- (ii) a. Every man  
b. All men  
c. \*All man

two forms that are crucial to my account of plural formation: the base form and the m-form, where the latter is derived from the base numeral by prefixing m- and H tone. The m-form contrasts with the base form phonologically because the initial tone of the base numeral is replaced with H tone. Some representative examples are given in (26).

| (26) | Base | m-form    | Output | Gloss   |
|------|------|-----------|--------|---------|
| a.   | ení  | m + ení   | *méní  | ‘one’   |
| b.   | òkan | m + òkan  | *mòkan | ‘one’   |
| c.   | èjì  | m- + èjì  | méjì   | ‘two’   |
| d.   | èta  | m- + èta  | mèta   | ‘three’ |
| e.   | èrin | m- + èrin | mèrin  | ‘four’  |

(adapted from Ajíbóyè & Déchaine 2004: 6)

Observe that the numeral ‘one’, which has two base forms (*ení* and *òkan*), cannot take the m- prefix. In what follows, I present the syntactic distribution of the base and m-form. First, both types can occur by themselves as nouns:

- (27) a. Mo ra **èjì**  
 1sg buy two  
 ‘I bought two.’
- b. Mo ra **méjì**  
 1sg buy two  
 ‘I bought two.’

Second, only the m-form can occur as a modifier, and therefore only the m-form seems capable of marking plural (28).

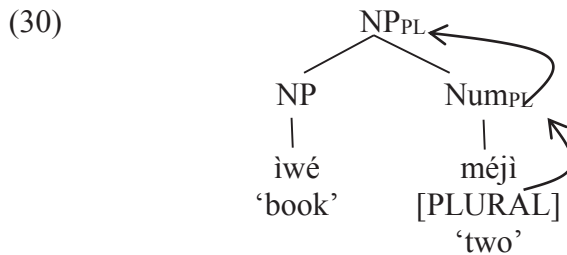
- (28) a. \*Mo ra [ìwé **ájò**]  
 1sg buy book two
- b. Mo ra [ìwé **méjì**]  
 1sg buy book two  
 ‘I bought two books.’

The m-form of numerals cannot occur with *òkan* ‘one’ and *ení* ‘one’, (29) to modify nouns.<sup>23</sup> This suggests two things: (i) only a numeral that denotes a set with cardinality />1/ can be used to derive the ‘m-numerals’, (ii) the m-form has to do with the semantics of more than ‘oneness’. I will return to this later.

<sup>23</sup> Note however, that in counting, *ení* can be in the m-form.

- (29) a. \*Mo ra [iwé **mókan**]  
 1sg buy book one
- b. \*Mo ra [iwé **méní**]  
 1sg buy book one

The analysis of numeral-as-plural-feature-bearer follows the one proposed for quantifiers. Adjoining the appropriate numeral form to an NP yields the desired result. The abstract [PLURAL] feature of the numeral percolates through the numeral to the NP, as illustrated in (30).<sup>24</sup>



<sup>24</sup> It appears only the *m*-form can co-occur with a noun. But observe that the base form like *èjì* 'two' also inherently contains an abstract [PLURAL] feature. As such it should be able to qualify to mark plural on nouns. But this is not the case. However there are certain instances where only the base form can modify nouns and consequently mark them for plural. There are a few things to note about such numerals. First, they do not allow the *m*-form, (i-a). Second, they precede the noun they modify, (i & ii). Third, they are multiples of ten starting from *ogún* 'twenty'. See Abraham (1958:xxxii-xxxvi), (i-iii).

- (i) a. Şhun ra [ogún iwé]  
 S. buy twenty book  
 'Şhun bought twenty books.'
- b. \*Şhun ra [iwé **mógún**]
- (ii) a. Jẽnrolá ta [ogbòn işu]  
 J. sell thirty yam  
 'Jenrola sold thirty yams.'
- b. \*Jẽnrolá ta [işu **mógbòn**]

When these numerals follow the nouns, they show ordinals and as such no longer mark nouns for plural.

- (iii) a. Şhun ra [iwé **ogún**]  
 S. buy book twenty  
 'Şhun bought the 20<sup>th</sup> book.'
- b. Jẽnrolá ta [işu **ogbòn**]  
 J. sell thirty yam  
 'Jenrola sold the 30<sup>th</sup> yam.'

There is more to say than claiming either that only the *m*-form or the base form of numerals qualifies as a plural marker. What determines which numeral must be in the *m*-form and which one must be in its base form to mark plural as well as the linear order between the numeral and the noun require further research.

Taking my discussion of quantifiers and numerals in these last two sections together, I conclude that quantifiers and numerals converge in the sense that they both have an inherent abstract [PLURAL] feature. The remaining issue to address is how to account for the H tone of the m-numerals.

### 6.2.3.1 Accounting for the floating H tone of m-numerals

Observe that each base numeral in (31) begins with L tone whereas each m-numeral consists of H tone that associates with the initial vowel of the base numeral thereby displacing the underlying L tone. I am going to argue that H tone of the m-forms comes from the morpheme *mú* ‘take’.

- (31)
- |    |                |           |       |
|----|----------------|-----------|-------|
| a. | èjì<br>‘two’   | m' + èjì  | méjì  |
| b. | èta<br>‘three’ | m' + èta  | mèta  |
| c. | èrin<br>‘four’ | m' + èrin | mérin |
| d. | èfà<br>‘six’   | m' + èfà  | méfà  |
| e. | èje<br>‘seven’ | m' + èje  | méje  |

There are two possible hypotheses for how to account for this H tone.

One hypothesis is that this floating H tone is there underlying with the m-prefix as part of the plural morpheme.

- (32)
- |    |          |   |      |         |
|----|----------|---|------|---------|
| a. | m' + èjì | > | méjì | ‘two’   |
| b. | m' + íta | > | mèta | ‘three’ |

Since floating tones are not allowed in Yorùbá (Bámgbósé 1966 among others) there are two options: the H tone either deletes or it associates with a tone-bearing unit adjacent to it. In the case under consideration, the H tone associates with the initial vowel of the base and the L tone deletes.

- (33)
- |                                                                                                                                                    |   |                                                                                                                                      |                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| $  \begin{array}{c}  \text{H} \quad \text{L} \\  \diagup \quad \diagdown \\  \text{m} \quad \text{e} \quad \text{j} \quad \text{i}  \end{array}  $ | > | $  \begin{array}{c}  \text{H} \quad \text{L} \\    \quad   \\  \text{m} \quad \text{e} \quad \text{j} \quad \text{i}  \end{array}  $ | (cf. Akinlabi 1985, Pulleyblank 1986a) |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|

Thus, one way of resolving the HL contour tone is through deletion of the L-tone.<sup>25</sup>

The other hypothesis is that the H tone is associated to a vowel underlyingly before the vowel deletes and the tone in turn associates with the nearest adjacent tone bearing unit (TBU). On the phonological content of this vowel Abraham (1958: xxxii) suggests that it is a prefix *ma*—According to him, whenever the base form such as *èjì* ‘two’ follows the noun, the prefix *ma*- links this numeral to the noun. In order words numerals such as *méjì* ‘two’ and *méje* ‘seven’ are derived from *ma* + *èjì* and *ma* + *èje*. This suggestion faces two problems. First is that of meaning. It is difficult to pick out the meaning of *ma* either as a lexical item or when it combines with numerals. The second is a phonological problem. Assuming that the prefix is M toned *ma*, one is faced with the question of how H tone surfaces when it combines with numerals whose initial tone is L.

In the alternative, I suggest that the morpheme is *mú* ‘take’. This suggestion comes from our knowledge of the counting system in Yorùbá. Native speakers count, *méní* ‘take one’, *méjì* ‘take two’, *méta* ‘take three’ etc. It is probably the case that this morpheme combines with the base form and undergoes vowel deletion as shown in (34).

- (34) a.      *mú*    *èjì*    >    *m’*    *èjì*    >    *méjì*  
          b.      *mú*    *èje*    >    *m’*    *èje*    >    *méje*

Note that there is nothing unusual with vowel and tone deletion in the language; in particular, when two vowels are juxtaposed across a word boundary (Bámgbósé 1966, 1967, 1989; Òla 1989; Oyèlárán 1971; 1990 among others). Once a tone-bearing unit deletes in this context, there is bound to be an extra tone. On which tone to delete, the claim in the literature is that when there is H and L concatenation, the L deletes and H survives because the tonal hierarchy in Yorùbá is H>L (cf. Chumbow 1982; Pulleyblank 2004).<sup>26</sup>

### 6.2.3.2 Other languages that pattern with Yorùbá

Yorùbá is not the only language where numerals form plural words. There are other languages that require no further marking whenever a numeral that denotes a set

<sup>25</sup> For details on resolution of contour tones in Yorùbá, readers are referred to (Bámgbósé 1966; Akinlabí 1985; Pulleyblank 1986; Laniran 1992).

<sup>26</sup> There is also one problem with the second hypothesis. This is the problem of why *méní* (*mú ení* ‘take one’) cannot combine with nouns. Observe, however, that when we count, we always have a sense of plurality. We don’t just count “one” thing. Therefore counting requires > 1 thing. This suggests that, although we count “1”, we are counting part of a plural set of objects.



with cardinality />1/ is used. Hungarian is one of such languages. In (35), *lány* ‘girl’ is marked as plural only by the presence of the numeral *két* ‘two’.

- (35) Két lány beszélget Hungarian  
 two girl.SG chat.SG  
 ‘two girls are chatting’ (Corbett 2000: 211).

However, there is a slight difference between Yorùbá and Hungarian. In Yorùbá it is possible to use other plural words to mark nouns for plural even when a numeral is present. This contrasts with Hungarian, which does not allow any other plural marking.<sup>27</sup> The question is how a language like Hungarian would be treated in the present analysis.

The explanation is that Hungarian permits only one instantiation of the PLURAL feature. It could also be that there is a language specific rule that prohibits further plural marking once a numeral is introduced. Note that even for Yorùbá all that is required is for at least one plural marker to be present.<sup>28</sup>

Further, there are languages where the presence of a numeral is mutually exclusive to dedicated plural word i.e., where a numeral and a dedicated plural word do not co-occur. The reason for this is because numerals occupy the same position as the plural word. In Gurung, a Tibeto-Burman language of Nepal, the plural word occurs in the same syntactic slot as numerals. The examples in (36) taken from Dryer illustrate this.

- (36) a cá pxra-báe mxi **jaga**  
 that walk-adj person PL  
 ‘those walking people’  
 b. ca mxi **só-bra**  
 that person Numeral  
 ‘those three hundred people’ (Dryer 1989: 872)
- (37) a \*cá pxra-báe mxi **só-bra jaga**  
 that walk-adj person Numeral PL  
 b. \*cá pxra-báe mxi **jaga só-bra**  
 that walk-adj person PL Numeral

<sup>27</sup> See §6.3.4 for multiple plural marking in Yorùbá.

<sup>28</sup> For Hungarian, one can also speculate that PLURAL takes precedence over SINGULAR, hence when an NP contains a numeral that has an abstract PLURAL feature and a noun with a SINGULAR feature, the NP is interpreted as plural because of this precedence constraint.

This means that plural word and numeral are in complementary distribution in Gurung (Dryer 1989: 871). Unfortunately, there is not enough data from Dryer's work to ascertain why plural and numerals cannot co-occur in this language. Such restriction however, is not witnessed in Yorùbá.

I now turn to the morphologically determined plurality.

### 6.3 Morphologically determined plurality

The third way by which Yorùbá marks plural on nominal expressions is through the use of certain dedicated words/morphemes whose only function is to mark plurality. I refer to this as a morphologically determined plurality. There are three plural morphemes in Yorùbá: *àwọn* marks plural on nouns, the prefix *wòn-* marks plural on demonstratives, and a copy marks plural on modifiers. I call these morphemes 'plural words' along the lines of Dryer (1989).

The term "Plural word" in this dissertation therefore, is a word or morpheme that gives a noun or an entity it co-occurs with a plural interpretation.<sup>29</sup> Observe that plural words cross-linguistically do not belong to a natural syntactic class. This is consistent with Dryer's observation that the grammatical category of words that function as plural words varies from language to language.<sup>30</sup> In Yorùbá, *àwọn* is a pronoun. As for the *wòn-* prefix, although it is clearly related to the 3pl weak pronoun *wòn/wòn*, it does not have the same distribution as weak pronouns. As for modifiers, to qualify as plural words, a modifier must undergo copying. Thus a

<sup>29</sup> Cf. Corbett's (2000: 135) definition of 'plural words' as special 'number words' that languages use to indicate number and Dryer's (1989: 865) definition which says 'a plural word is a morpheme whose meaning and function is similar to plural affixes in other languages.'

<sup>30</sup> For example Hawaiian (i) and French (ii) use articles to mark plural.

- (i) a. **ke** keiki  
SG child  
'the child'  
b. **nā** keiki  
PL child  
'the children' (Hawaiian Dryer 1989: 872)

- (ii) a. **la** pomme  
[læ p≠m]  
the, fem apple  
'the apple'  
b. **les** pommes  
[le p≠m]  
the, plur apple  
'the apples' (French Dryer 1989: 873)

Peñoles Mixtec combines plural words with numerals e.g. (Dryer 1989).

- (iii) oko **kwee** tee  
twenty PL man  
'twenty men' (Peñoles Mixtec Dryer 1989: 872)

modifier-plural word consists of ‘COPY’ in Yorùbá. In order to account for how these plural words mark nouns for plural, I also appeal to the feature percolation mechanism already motivated above.

### 6.3.1 *àwọn* marks plural on nouns

I have already established in Yorùbá that when a bare noun occurs by itself, there is no way by which we know whether it is singular or plural. This is why I claim that Yorùbá bare nouns are not specified for plural. The only way by which plural is overtly marked on nouns is through the use of *àwọn* ‘3pl strong pronoun’<sup>31</sup> (Dryer 1989, Rowlands 1969).<sup>32</sup> In (38a) *àwọn* marks *ọkùnrin* ‘man’ as plural, in (38b) it marks *obìnrin* ‘woman’ as plural; in (38c) it marks both *ọkùnrin* ‘man’ and *ọmọ Israeli* ‘child of Israel’ as plural. However, in (38), in addition to *àwọn*, there are other lexical items that relate to plural interpretation. As I demonstrated in §6.2, numerals like *méta* ‘three’ in (38a) have an abstract plural feature that can be realized on the noun in the absence of a plural word. Similarly, as I show in §6.3.2 below, the prefix *wọn* that attaches to the demonstrative *yìí* in (38b) is a plural morpheme.

- (38) a. [*àwọn* ọkùnrin]      méta    yìí  
 PL      man    three    this  
 ‘these three men’      (Dryer 1989: 875)
- b. [*àwọn* obìnrin wọn-yí] wá      tún      pín      sí      méjì  
 PL                      womanPL-DEM      come    again    divide to      two  
 ‘These women again divide into two groups.’      (Fágúnwà 1961: 15)
- c. [*àwọn* ọkùnrin kan] nínú    [*àwọn* ọmọ Israeli]    dé    ihín yìí  
 PL      man      Spéf among    PL      child Israel    reach    place this  
 ‘Certain men among the children of Israel got here.’ (Joshua 2:2)

I propose the structure in (39) which shows that a Yorùbá NP consists of a bare NP and a plural word that is left adjoined to the NP.<sup>33</sup> Applying the percolation

<sup>31</sup>Note that Yorùbá is not the only language that uses 3pl to mark plurality. Others include Chamorro and Ngarinjin (Dryer 1989: 877), Angas and some Creoles (Corbett 2000: 135 fn.3).

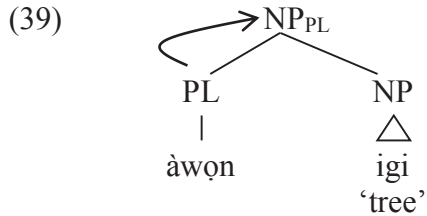
(i) a. mandjan biri  
       stone    PL  
       ‘stones’  
       b. biri-ma-ra  
       they-say-past  
       ‘They said.’      (Dryer 1989: 87)

See the chapter on genitive construction for the definition of strong pronouns.

<sup>32</sup> The universal quantifier *gbogbo*, patterns with *àwọn* in the sense that it also precedes the noun.

<sup>33</sup> This poses the problem of how to account for the disparity between Šábèḗ, Idáíḗṣá and Kétu dialects where the 3pl pronoun follows the noun (Martí 1992) and the case in Standard Yorùbá being reported where the 3pl

mechanism, the plural feature of *àwọn* percolates onto the higher NP node.



As we shall see, all plural morphemes are left adjoined to NP in Yorùbá. For *àwọn*, which is the plural morpheme associated with nouns, this means that it must precede the noun that it pluralizes, as shown in (40).

- (40) Plural marking on nouns
- a.      Mo      bí                      [**àwọn** ọmọ]  
           1sg    born    PL        child  
           ‘I have children.’
- b.      Mo      bí                      [**\*ọmọ àwọn**]  
           1sg    born    child    PL

This concludes the discussion on *àwọn* as a plural word that marks plural on nouns. I now turn to *àwọn* as a pronoun.

### 6.3.1.1 *àwọn* as a pronoun

Apart from functioning as a plural word, *àwọn* is active in other domains in the syntax of Yorùbá like any other Yorùbá strong pronouns. Consider (41) and (42) where both the 3pl weak pronoun *wọn* and the 3pl strong pronoun *àwọn* occur in argument position.

- (41) a.      Jeff wanted to know if Solveiga and Mario were at my birthday party. In response, I said (41b).  
       b.      **Wọn** wá  
               3pl    come  
               ‘They came.’

Let us now consider the context where *àwọn* is used.

- (42)a. Jeff was not sure if Solveiga and my friends were at the party yesterday. When he asked of Solveiga I answered replied with (42b) because I did not see her. But when

---

precedes the noun. However, there is not enough data that will reveal a wider range of the distribution of *wọn* in those dialects as such, I consider only the case of Standard Yorùbá for this present study.

he asked of my friends, I replied with (42c) because I wanted him to know that truly they were present.

- b. Òun kò wá  
3sg neg come  
'She did not come.'
- c. Àwọ̀n ọ̀n wá  
3pl HTM come  
'They came.'

Two additional facts about *àwọ̀n* are revealed in the above examples. Compared to its clitic counterpart *wọ̀n*, *àwọ̀n* is emphatic. The sentence in (41b) will be uttered in normal speech but when someone wants to be emphatic, (42b) is used. The use of *àwọ̀n* is also an expression of certainty. The speaker is very certain of the referents' presence in (42b) whereas (41b) does not necessarily reflect certainty or uncertainty of the referents' absence. These two properties are peculiar to all the so-called strong pronouns when they occur in argument position.<sup>34</sup>

### 6.3.1.2 Appositive analysis of PL-NP

A diachronic account contained in Dryer's work is that *àwọ̀n* in (43a) may be analyzed as a pronoun head, with *ọ̀kùnrin méta yìí* functioning as an appositive noun phrase. This predicts that *àwọ̀n* is also a NP. In the appositive analysis, the structure for (43a) would be (43b).

- (43) a. Mo      rí      [àwọ̀n ]      [ọ̀kùnrin      méta      yìí]]<sup>35</sup>  
1sg    see    they            man            three    Dem  
'I saw them these three men.'

<sup>34</sup> For details on the Yorùbá pronominal system see among others Bámgbósé (1967), Rowlands (1969), Pulleyblank (1986), Manfredi (1987), Dryer (1989), Adéşolá (2000) Déchaine & Wiltschko (2002a&b), and Ajíbóyè (2005a).

<sup>35</sup> This kind of nominal expression is actually found in some Southern dialects of English spoken in the United States as shown in (i).

- (i) a. I      saw      [them    child-    ren]  
                                 PL                   PL  
b. [Them    dogs] are in the yard  
         PL                   -PL

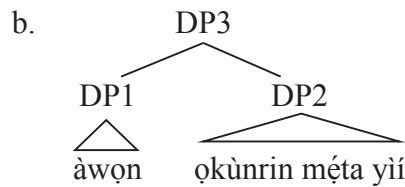
(Wilson personal communication)

The Standard form of (i) is rendered as (ii).

- (ii) a. I saw [the children]  
b. [The dogs] are in the yard

Such dialects may be good for reconstruction on the 'plural agreement neutrality' that is witnessed today in Standard English whenever a plural noun takes the determiner *the*.

- (iii) a. the boy            (singular)  
b. the boys            (plural)



In (43), *àwọ̀n* and *ọ̀kùnrin mẹ́ta yìí* are said to refer to the same people, hence they are analyzed as separate DPs (DP1 & DP2).

Dryer's analysis correctly predicts that strong pronoun, (44a) and weak pronoun (44b) can occur independently.

- (44) a.      Mo      rí      **àwọ̀n**  
               1sg    see    3pl.strong  
               'I saw them.'

- b.      Mo      rí      **wọ̀n**  
               1sg    see    3pl.weak  
               'I saw them.'

His analysis also incorrectly predicts that both strong pronoun (45a), and weak pronoun (45b), should be able to occur with nouns to mark them for plural. But this is only true of the strong pronoun.

- (45) a.      Mo      rí      **àwọ̀n** ọ̀kùnrin  
               1sg    see    PL     man  
               'I saw the men.'
- b.      \*Mo      rí      **wọ̀n/wọ̀n**    ọ̀kùnrin  
               1sg    see    3pl.weak    man

The fact that *wọ̀n/wọ̀n* '3pl clitic pronoun' cannot occur with *ọ̀kùnrin* 'man' to mark it for plural in (45b) casts doubt on Dryer's claim that *àwọ̀n* in (43) should be analyzed as an appositive.

One way to tell whether (43) is a single DP or two DPs in apposition is the position of *gbogbo*. If (43) were to be two DPs in apposition, one would expect (46) to be possible such that *gbogbo* modifies the second DP.

- (46) \*Mo      rí      [**àwọ̀n**]      [gbogbo      ọ̀kùnrin      mẹ́ta      yìí]  
               1sg            see      [3PL]      [all            man      three    Dem]

What we have instead is (47), where *gbogbo* precedes the 3PL implying that *gbogbo* modifies the entire phrase.

- (47) Mo      rí      [gbogbo      àwọn ọkùnrin      mēta yìí]  
       1sg    see    [all    PL                    man    three    Dem]  
       ‘I saw all these three men.’

The fact that *àwọn* cannot precede *gbogbo* is evidence that *àwọn* is not a separate DP and as such, (43) cannot be analyzed as an appositive phrase in the language.

### 6.3.1.3 Internal structure of *àwọn*

There is one more question that I address, namely the morphology of 3PL *àwọn*. Comparing the example from Sábẹẹ dialect with Standard Yorùbá, it appears the 3pl pronoun has two forms *àwọn* versus *wọn* which might suggest that one is derived from the other historically.<sup>36</sup>

- (48) a.      egi      wọn                      *Sábẹẹ*  
           tree    3pl  
           ‘trees’  
       b.      àwọn    igi                      *Standard Yorùbá*  
           3pl    tree  
           ‘tree’

The question is which one is the base and which one is derived? There are two hypotheses that I put forward.

- (49) H1: *àwọn* is the basic form and *wọn* is derived from it through a phonological process which deletes the first vowel.  
       H2: *wọn* is the basic form and *àwọn* is derived from it through a morphological process of prefixation that prefixes *à-* to *wọn*.

At first glance, both hypotheses look plausible and seem to have support from internal evidence. But I am going to argue in support of the second hypothesis. I consider the deletion option first.

Deletion as a phonological process is robust and productive in Yorùbá, and it occurs in many word formation processes. The examples in (50) show deletion

<sup>36</sup> According to Martí (1992: 13), in Sábẹẹ, Idàìẹ́ṣá and Kétu dialects of Yorùbá, the plural marker follows the noun it pluralizes.

involving two concatenated vowels at morpheme boundary where /a/ is the initial vowel of the second morpheme. What one observes is that it is the first vowel that deletes.

- (50) a.      ì-      jẹ      ayé      >      ìjayé  
               Nom   eat      life  
               ‘enjoyment’
- b.      à-ì-              gbé      ayé      >      àìgbáyé  
               Nom-NEG      live      world  
               ‘act of not living’
- c.      ì-      kó      adé      >      ikádé  
               Nom   gather   crown  
               ‘gathering crown.’
- d.      ì-      ní      adé      >      iládé  
               Nom   have   crown  
               ‘having crown’
- e.      ì-      gbọ́      afẹ      >      ìgbáfẹ  
               Nom   hear   enjoyment  
               ‘loving socialization’

The fact that ‘a’ is not deleted in any of these examples provides a strong argument against the claim that *wọn* is derived from *àwọn* through deletion of the initial *à*.

On the other hand, there is ample data to back up the claim that *àwọn* is derived through a morphological process of prefixation. In fact there are many nouns that are derived by prefixing an affix to a verb including *à*-. Some examples are given in (51).

- (51) a.      à-      tọ      >      àtọ  
               Nom   urinate  
               ‘semen’
- b.      à-      lọ      >      àlọ  
               Nom   go  
               ‘departure/leaving’
- c.      à-      bọ      >      àbọ  
               Nom   arrive  
               ‘arrival’



- 
- |    |     |       |         |   |                     |
|----|-----|-------|---------|---|---------------------|
| d. | à-  | wà    | yè      | > | àwàyè               |
|    | Nom | drive | survive |   |                     |
|    |     |       |         |   | ‘driving safely’    |
|    |     |       |         |   |                     |
| e. | à-  | rò    | pin     | > | àròpin              |
|    | Nom | think | end     |   |                     |
|    |     |       |         |   | ‘consider hopeless’ |

In view of the fact that word formation with the à- prefix is possible and plausible, I adopt the second hypothesis in accounting for the morphology of *àwọn*, claiming that it is derived from *wọn* through prefixation of à-. The alternative hypothesis, namely that *wọn* is derived from *àwọn* through deletion of the initial vowel, is rejected because it posits a word formation process (deletion of the initial vowel /a/) that is otherwise unattested in Yorùbá.<sup>37</sup>

Finally, I also need to point out that the plural word *àwọn* shares some morphological structure and process with demonstratives in the sense that they can take “è -/i” nominalizer prefix just as *wọn* takes “à-”. This process derives demonstrative nouns. I show this in (52).

- (52) a.    è-      yìí  
           Nom   Dem  
           ‘this one’
- b.    ì-      yẹn  
           Nom   Dem  
           ‘that one’

Note that each of the demonstrative nouns in (52) consists of the base: *yìí* and *yẹn*.

### 6.3.2 wọn- marks plural on demonstratives

This section discusses how demonstratives are used as plural words. First, I show that the base form of demonstratives is unmarked for plural. That is why the nouns they combine with is obligatorily interpreted as singular.

- (53) a.    Mo    ra    ilé    **yìí**  
           1sg   buy   house   Dem  
           ‘I bought **this house**.’

---

<sup>37</sup> This is not say that V2 can never be deleted in Yorùbá.

- b.      Mo      ta      ilé      **yẹn**  
           1sg    sell    house Dem  
           ‘I sold **that house**.’

Demonstratives are pluralized by prefixing the morpheme *wọ̀n-* as in (54).<sup>38</sup>

- (54) a.      **wọ̀n-**yíí  
              PL-Dem  
              ‘these’
- b.      **wọ̀n**    yẹn  
           PL     Dem  
           ‘those’

Observe that when a demonstrative is unmarked and it takes a noun, the NP is obligatorily interpreted as singular (55a). To get a plural interpretation, the demonstrative (55b) must be marked for plural.

- (55) a.      Mo      rí      [ájá    yíí]                      NP      DEM  
              1sg    see    dog    DEM  
              =‘I saw this dog.’  
              ≠‘I saw these dogs.’
- b.      Mo      rí      [ájá    **wọ̀n-yíí**]                      NP      **PL-DEM**  
              1sg    see    dog    PL-DEM  
              ‘I saw these dogs.’  
              ≠‘I saw this dog.’

Recall that in the present analysis, demonstratives are heads and they take NPs as their complement. The NP moves to Spec D(em)P, which derives the surface linear order. The plural feature on the demonstrative percolates to the D(em)P and assigns

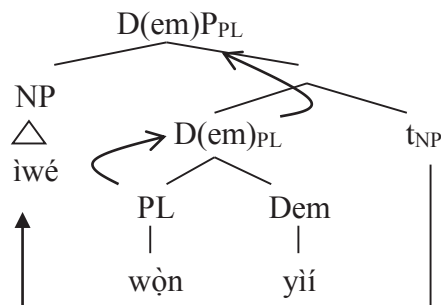
<sup>38</sup> Note also that whenever *wọ̀n* combines with demonstratives to form plurals the derived word can in turn undergo another nominalization process by prefixing *ì-*. This further supports the claim that *àwọ̀n* is derived from *wọ̀n* by prefixation of *à-*

- (i) a.      ì-      wọ̀n-    yí  
              ‘Nom    PL     Dem  
              ‘these ones’
- b.      ì-      wọ̀n-    yẹn  
       Nom    PL     Dem  
              ‘those ones’

One can also claim that *àwọ̀n* is derived from the plural prefix *wọ̀n* by prefixing /à/ to the former. However such argument is not tenable considering the fact that the output *\*àwọ̀n* is not attested.

the whole phrase its plural feature.

(56) *Plural percolation via demonstrative*



Finally, there is a common factor shared by the plural word *à-wòn* on nouns and the plural prefix *wòn* on demonstratives, namely the presence of L-tone on them:

- (57) a.      à-      wòn  
b.      wòn-    yìí

It is desirable to inquire if there is anything that this L tone can tell us about plural marking in Yorùbá or if its presence is a mere accident. Another thing that is required to know is if there is any difference between the L tone *wòn* that marks plural on demonstratives and the H toned pronouns *wòn* and the M toned *wòn* that are used as weak pronouns?

One possible analysis is to claim that like its M-tone and H-tone counterparts, *wòn* L-tone is a pronoun. Then, the claim will be that the tonal alternation is syntactically motivated: the pronoun bears H tone when in subject position (58a) and M when it functions as an object (58b). In contrast, when this pronoun functions as a plural morpheme it bears L tone (58c).

- (58) a.      **Wòn**    rí      mí  
             3pl    see    1sg  
             'They saw me.'
- b.      Mo      rí      **wòn**  
             1sg    see    3pl  
             'I saw them.'
- c.      Mo      rí      **wòn-**    yìí  
             1sg    see    PL-    Dem  
             'I saw these Xs.'

On the other hand, the L-tone *wòn* neither appears as a subject nor as an object NP:

- (59) a. \*Wòn rí mi  
PL see 1sg
- b. \*Mo rí wòn  
1sg see PL

In the same vein, the M/H toned form does not function as a plural morpheme:

- (60) a. \*wòn -yǐ  
b. \*wòn yǐ

One argument against this claim is that the plural morpheme on demonstratives always bears L tone as opposed to H or M. Observe that, in contrast to *wòn* which may surface with H, M or L tone the 3pl strong pronoun *àwòn* bears initial L tone irrespective of whether it functions as an independent pronoun (61a-b) or as a plural word (61c).

- (61) a. **Àwòn** rí mi  
3pl see 1sg  
'They saw me.'
- b. Mo rí **àwòn**  
1sg see 3pl  
'I saw them.'
- c. Mo rí **àwòn** ọmọ  
1sg see PL child  
'I saw children.'

This is an area for further research.

### 6.3.3 Reduplication marks plural on modifiers<sup>39</sup>

Another way by which Yorùbá expresses plurality on its nouns is through the use of modifiers. A modifier-as-plural-word consists of a 'COPY-modifier'.<sup>40</sup> Bare nouns

<sup>39</sup>Cross-linguistically, reduplication is extensively used to form plural forms. There are several variations on how reduplication operates, depending on the base form of the noun or the entity that is reduplicated for the purpose of marking plural. In any case, all of the reduplication processes create a reduplicant, a prefix whose phonetic content is from the segments that make up the base.

<sup>40</sup>I should say the use of "COPY" as a mechanism of marking plural is famous among Yorùbá writers, as demonstrated in the early novels. The example in (i) is taken from one of the works of Fágúnwà, a famous Yorùbá novelist. The copied modifier *ńlá* in citation means 'big' but when used as a plural word as in (i), it means 'great Xs'.

(i) Ẹwọ ni O ni [agbára ńlá]  
2sg FOC 2sg own power big  
tí O fí dá gbogbo [ńkan **ńlá** ńlá] inúáyé...

with plain modifiers display an ambiguity between a singular and plural interpretation. This is illustrated in all the (a) examples in (62)-(66). However, this ambiguity disappears once the modifier is copied. This is reflected in the (b) examples.

- (62) a. Ìlú yìí ní [àṣà burúkú]  
 town DEM have custom bad  
 = (i) 'This town has a bad custom.'  
 = (ii) 'This town has bad customs.'
- b. Ìlú yìí ní [àṣà **burúkú** burúkú ]  
 town DEM have custom COPY bad  
 'This town has bad customs.'
- (63) a. Péjú ta [bọ̀lù pupa]  
 P. sell ball red  
 = (i) 'Peju sold a red ball.'  
 = (i) 'Peju sold red balls.'
- b. Péjú ta [bọ̀lù **pupa** pupa]  
 P. sell ball COPY red  
 'Peju sold red balls.'
- (64) a. Ọ̀mọ̀lẹ̀ fọ̀ [ìgò palaba]  
 O. wash bottle flat  
 = (i) 'Omole washed a flat bottle.'  
 = (ii) 'Omole washed flat bottles.'
- b. Ọ̀mọ̀lẹ̀ fọ̀ [ìgò **palaba** palaba]  
 O. wash bottle COPY flat  
 'Omole washed flat bottles.'
- (65) a. Mo ra [ògèdè ñlá]  
 1sg buy banana big  
 = (i) 'I bought a big banana.'  
 = (ii) 'I bought big bananas.'

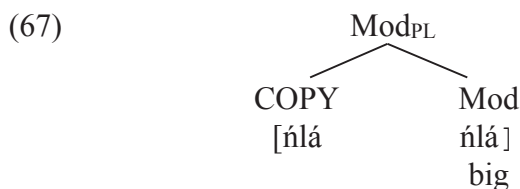
---

that 2sg use create all thing COPY big inside world  
 'You are the one that has a **strong** power that you used in creating all the **great things** in this world.' (Fágúnwà 1961: 146)

See Bámgbósé (1967: 112-113); Pulleyblank (2002) and Ajíbóyè and Déchaine (2004) for various accounts of Yorùbá reduplication.

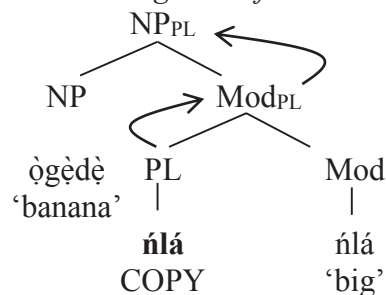
- b. Mo ra [ògèdè **ńlá** ńlá]  
 1sg buy banana COPY big  
 ‘I bought big bananas.’
- (66) a. Abíólá ní [ilé gíga] ní Èkó  
 A. have house tall P Lagos  
 = (i) ‘Abiola has/owns a tall building in Lagos.’  
 = (ii) ‘Abiola has/owns tall buildings in Lagos.’
- b. Abíólá ní [ilé **gíga** gíga] ní Èkó  
 A. have house COPY tall P Lagos  
 ‘Abiola has/owns high-rise buildings in Lagos.’

Following Orié and Pulleyblank (2002) and Ajíbóyè and Déchaine (2004), I assume that the copied entity is at the left edge of the base.<sup>41</sup> Consequently, I adopt the structure in (67) for the Yorùbá copy-modifier. The plural marker is left adjoined to the modifier to form a plural modifier (cf. Kayne 1994).



The analysis of modifiers is the same as that of demonstratives reported above. For completeness, I show how the mechanism of feature percolation derives plural NPs with modifiers using (65b) as an illustration.

(68) *Plural percolation through modifier*



<sup>41</sup> While this claim is not transparent in full reduplication as it is difficult to know which one is the base and which one is the COPY, evidence comes from partial copy, which derives gerunds. The fact that only (i-a), which has the COPY to its left is grammatical attests to this claim.

- (i) a. dé dǐ-dé  
       ‘arrive’ ‘arrival’  
       b. dé \*dé-dǐ

Yorùbá speakers do not have the same judgments on which sub-classes of modifiers can be copied to mark plural. While Bámgbósé (1967:112-113) reports that quality modifiers (e.g. *burúkú* ‘bad’) and quantity modifiers (e.g. *ńlá* ‘big’) can be copied to ‘indicate more-than-one-ness’, some other native speakers cannot process copying that involves colours (such as *dúdú* ‘black’) or qualities (such as *burúkú* ‘bad’) as plural words. For the purpose of this dissertation, I consider quality, dimension and colour<sup>42</sup> as modifiers that can undergo copying for plural marking. Some representative examples are given in (69).

- (69) a.      *ajá*      *burúkú burúkú*                      quality  
               dog    bad    bad  
               ‘dangerous dogs’
- b.      *ajá*      *ńlá*      *ńlá*                      dimension  
               dog    big    big  
               ‘big dogs’
- c.      *ajá*      *dúdú*      *dúdú*                      colour  
               dog    black   black  
               ‘black dogs’

Putting aside speaker variation, it remains that in Yorùbá, not all modifiers are eligible for copying to mark plural. In particular the class of attributives (70a),<sup>43</sup> most ideophones (70b),<sup>44</sup> and locatives (71-72) cannot be copied to form plurals.

- (70) a.      \**ajá*      *olóríburúkú*      *olóríburúkú*  
               dog    COPY              unlucky

<sup>42</sup> Observe that quantity modifiers (quantifiers and numerals) are treated as a kind of plural word with an abstract [PLURAL] feature. They therefore require no copying to function as plural words. When they are copied they modify verbs, (i-b).

(i) a.      *Mo*      *ra*      *iwé*      *púpò*  
               1sg    buy    book    many  
               ‘I bought many books.’

      b.      *Mo*      *ra*      ***púpò***      *púpò*  
               1sg    buy    COPY    many

              ‘I bought in large quantity (i.e., the buying was done in large quantity).’

<sup>43</sup> Attributive as used here is a kind of modifier that describes or characterizes the mental state of the noun it modifies. This contrasts with the standard use of the term as any adjective, which appears directly beside the noun. These modifiers are attributives because they assign some kind of quality to the noun they modify.

<sup>44</sup> According to Doke in Awóyalé (1974:139), an ideophone is a word, often onomatopoeic, which describes a qualificative, predicative, or an adverb with respect to sound, colour, smell, manner, state, action or intensity. Actually, there is a category of ideophones that can be copied to mark plural (cf. Beck 2005).

- b.      \*ajá      jàtijàti jàtijàti<sup>45</sup>  
             dog      COPY feckless
- (71) a.      eyín      òsì  
             tooth left  
             ‘left tooth’
- b.      \*eyín      òsì      òsì
- (72) a.      apá      òtún  
             arm right  
             ‘right arm’
- b.      \*apá      òtún      òtún

The reason why locative modifiers cannot undergo copying might be because ‘left’ and ‘right’ are unique.

The next thing that I would like to discuss is the size of the copied item. Whenever a modifier is copied for the purpose of marking plural, it is the whole word that is copied. In most cases, full copying is subject to certain phonological constraints. In particular, Òla (1995), and Orie and Pulleyblank (2002) claim that what determines the size of what is to be copied is the principle of “foot binarity”.

I also observe that whenever a modifier is copied, it does not undergo any phonological process of either deletion or assimilation either at the segmental or the tonal level. This may be because the kind of copying under discussion is syntactic<sup>46</sup> or because of its phonology: the modifiers in question are all consonant initial.<sup>47</sup>

<sup>45</sup> The category of ideophones that can be copied to mark plural in Yorùbá is shown by the examples in (i), (cf. Beck 2005).

- (i) a.      Mo      ra      ìgò      palaba  
             1sg      buy      bottle      flat  
             = ‘I bought a flat bottle.’  
             = ‘I bought flat bottles.’
- b.      Mo      ra      ìgò      **palaba**      palaba  
             1sg      buy      bottle      COPY      flat  
             ‘I bought flat bottles.’

<sup>46</sup> See Inkelas and Zoll (2000) and Pulleyblank (2002) among others for discussions that centered on phonological and morphological reduplication.

<sup>47</sup> Observe that Yorùbá also makes use of the partial copying strategy to derive gerunds. If modifiers were to be partially copied for the purpose of plural marking, the process would involve copying the first consonant of the modifier and the insertion of a fixed segment (the H toned /i/).

- (i) a.      kékeré      \*kí-kékeré  
             small      COPY-small
- b.      dúdú      \*dí-dúdú  
             black      COPY-black
- c.      ñlá      \*ní- ñlá



- 
- (73) a.      *ńlá*      >      *ńlá*    *ńlá*  
              big                      COPY big
- b.      *pupa* >      *pupa* *pupa*  
              red                      COPY red
- c.      *kékeré* >      *kékeré* *kékeré*  
              small                      COPY small

One final question that I address is what happens when two or more modifiers modify a noun. In Chapter 1, I have shown that Yorùbá modifiers fall into four distinct semantic classes of colour, dimension, quality, and quantity. Also, in my discussion of overt plural marking with modifiers above, I have shown that the COPY of the modifier functions as plural word. There is a restriction on the copying process when there is more than one modifier in a nominal expression. The observation is that only a modifier that is adjacent to a noun can undergo copying. This claim is supported by the examples in (74) where there are two modifiers: *ńlá* ‘big’ and *tuntun* ‘new’ that modify *ilé* ‘house’. As it turns out, only the first of the two, namely *ńlá* can be copied.

- (74) a.      *ilé*      ***ńlá***    *ńlá*    *tuntun*  
              house PL    big    new  
              ‘new big houses’
- b.      \**ilé*    *ńlá*      ***tuntun*** *tuntun*

The second restriction is that only one modifier can be copied. So, in (75b) despite the fact that the adjacent modifier is copied thus satisfying adjacency constraint, it is not possible to extend copying to the next modifier.

- (75) a.      *ilé*      ***ńlá***    *ńlá*    *tuntun*  
              house PL    big    new  
              ‘new big houses’
- b.      \**ilé*    ***ńlá***    *ńlá*      ***tuntun*** *tuntun*  
              house PL    big    PL    new

Even when the noun itself is marked for plural such ungrammaticality or infelicity (as witnessed in (74) remains. This is what I show in (76)-(77).

---

big                      COPY-big  
 Unfortunately, partial copying does not apply to modifiers not to talk of using it for plural marking. I conclude that copying that involves plural marking must be full and not partial.

- (76) a. **àwọ̀n** ilé **kékeré** kékeré tuntun  
 PL- house small PL- new  
 ‘new small houses’
- b. **\*àwọ̀n** ilé kékeré **tuntun** tuntun  
 PL- house small PL- new
- (77) a. **àwọ̀n** ajá **dúdú** dúdú kékeré  
 PL- dog PL black small  
 ‘small black dogs’
- b. **\*àwọ̀n** ajá dúdú [**kékeré** kékeré]  
 PL- dog black PL- small  
 small black dogs’

It appears there is more to be done before we can make a definite conclusion on specific restrictions guiding modifier copying when they are stacked within NPs in Yorùbá. I address what prevents N copy for the purpose of plural marking next.

### 6.3.3.1 What prevents N copy: blocking

Cross-linguistically, copying can be used to mark a number of grammatical functions including plurality, distributivity, perfective aspect, continuous/progressive aspect, diminutives, augmentatives, intensification (Moravcsik 1978, Ghomeshi et al. 2004). The issue of why nouns are not copied in Yorùbá for the purpose of plural marking is the concern of this section. I have shown that Yorùbá makes use of copying modifier for this purpose. On the other hand, Mandarin copies classifiers for plural marking.

- (78) (yì) zhang –zhang zhi *Mandarin*  
 one CL CL paper  
 ‘pieces of paper (with an emphasis on the individual pieces)’ (Yang 2004: 1)

If Yorùbá were to be like Mandarin we expect (79) where the classifier is copied. But such examples are ill-formed in Yorùbá.

- (79) **\*awẹ** awẹ iwé *Yorùbá*  
 sheet sheet paper

The question that arises is this: why is it that nouns cannot be copied to mark plurality on nouns in Yorùbá? Observe that there are many languages that copy

For those nouns to be copied, it must be aimed at deriving negative polarity items or ‘any bad X’ in which

What this boils down to is that variation with respect to copying might be a language specific rule. In Yorùbá such a rule will pick out modifiers i.e. copying is only available for plural marking if the base is a modifier. I treat the Yorùbá case of using COPY for modifiers but not for nouns as an instance of ‘The Emergence of the Unmarked (TETU) as I will discuss in the next subsection.

### 6.3.3.2 The emergence of the unmarked

There appear to be two cases of noun copy that we can talk about across languages. First, there is copying of nouns to mark plural, this I call the general case since many languages make use of this device. The other copying of nouns for more specified functions other than plural marking; this I call the restricted case. This is the category that Yorùbá belongs.

- (83) a. Case I: (General) e.g. Amele  
 $[\alpha \text{ N}] [\alpha \text{ N}] \Rightarrow$  pluralization
- b. Case II (Restricted) e.g. Yorùbá  
 $[\alpha \text{ N}] [\alpha \text{ N}] \Rightarrow$  quantification

What we already saw is that Yorùbá does not use the general case. On the restricted Case, whenever nouns are reduplicated in Yorùbá, they have the specific function of distributive quantification with numerals (84) or temporal expressions (85).

- (84) a.  $\begin{matrix} \text{èjì} & \Rightarrow & \text{èjì} & \text{èjì} & \Rightarrow & \text{èjèèjì} \\ \text{'two'} & & \text{two} & \text{two} & & \text{'all two'} \end{matrix}$
- b.  $\begin{matrix} \text{èjẹ} & \Rightarrow & \text{èjẹ} & \text{èjẹ} & \Rightarrow & \text{èjèèjẹ} \\ \text{'seven'} & & \text{seven} & \text{seven} & & \text{'all seven'} \end{matrix}$
- (85) a.  $\begin{matrix} \text{alẹ} & \Rightarrow & \text{alẹ} & \text{alẹ} & \Rightarrow & \text{alaalẹ} \\ \text{'night'} & & \text{night} & \text{night} & & \text{'every night'} \end{matrix}$
- b.  $\begin{matrix} \text{òsẹ} & \Rightarrow & \text{òsẹ} & \text{òsẹ} & \Rightarrow & \text{òsòòsẹ} \\ \text{'week'} & & \text{week} & \text{week} & & \text{'every week'}^{50} \end{matrix}$

case there is an infixation after copying (Koch 2004, 2005, Ajíbóyè 2004).

- (ii) a.  $\begin{matrix} \text{ilé} & \text{ilé} & \text{ilé} \\ \text{'house'} & \text{'any house/bad house'} \end{matrix}$
- b.  $\begin{matrix} \text{owó} & \text{owó} & \text{owókówó} \\ \text{'money'} & \text{'any money/ill-gotten money'} \end{matrix}$

Like modifiers, what determines the type of nouns that can be copied needs further research.

<sup>50</sup> For details, see (Ajíbóyè & Déchaine 2004).

I claim that because N-copy has a dedicated function in Yorùbá, it cannot be interpreted as pluralization. The generalization is that the more specified meaning (i.e. distributive quantification of numerals and temporal nouns) blocks the more general meaning (i.e. pluralization of N). As a last resort, Yorùbá has to adopt the marked form of plural marking i.e. the use of COPY modifier. This is what I call The Emergence of the Unmarked (TETU).<sup>51</sup>

Observe that in many languages, whenever modifiers are reduplicated they have a degree reading. This is the general case. English is a language that adopts this device. The restricted case (i.e. Case II), which Yorùbá adopts, is using the copy form to mark plural.

- (86) a. Case I: Degree reading e.g. English  
            $[\alpha \text{ Mod}] [\alpha \text{ Mod}]$   
           tall tall man  
           ‘a very tall man’
- b. Case II: Plural marking e.g. Yorùbá  $\Rightarrow$  TETU  
            $[\alpha \text{ Mod}] [\alpha \text{ Mod}]$   
           òkùnrin gígá gígá  
           man tall tall  
           ‘tall men’

Adapting this to plural marking makes the prediction that if a language fails to use COPY (i.e. reduplication) on N for the purpose of marking plural, then that language should use the marked form i.e. COPY on modifier if it has a reduplication process.<sup>52</sup>

### 6.3.4 Multiple plural marking

As mentioned earlier, there are two syntactic positions available for plural marking within Yorùbá nominal expressions the noun or the modifying elements (quantifiers/numerals, demonstratives and modifiers). What I have accounted for so far are cases involving one of the two positions at a time. In this section, attention is going to be focused on cases where both syntactic positions are marked for plural. This is what I call multiple plural marking. First, I present the data. In (88a-d) the

<sup>51</sup> The idea of the emergence of the unmarked (TETU) is not novel in Phonology literature (McCarthy and Prince 1993, 1994 and in syntax too (Bermúdez-Otero & Börjars 2002). In Optimality Theory (OT), a constraint can be active even if it is crucially dominated. A low-ranking markedness constraint, then, can decide between candidates, as long as they tie on all higher-ranking constraints. The linguistic structure that is unmarked with respect to this constraint can emerge in such circumstances (McCarthy and Prince 1994).

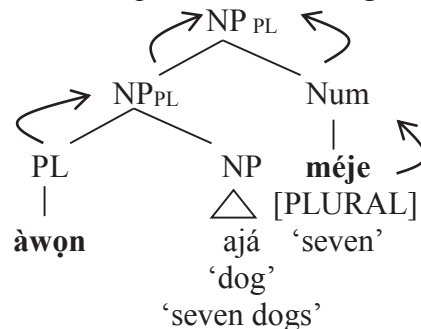
<sup>52</sup> However, this prediction is not true cross-linguistically as there are languages (e.g. Halkomelem), which marks plural on nouns with plural words that are not copied.

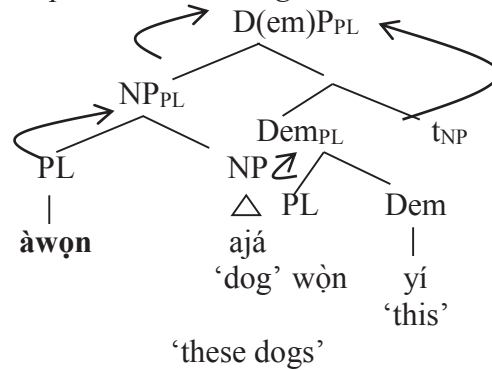
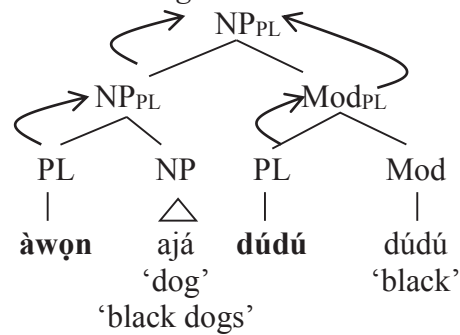
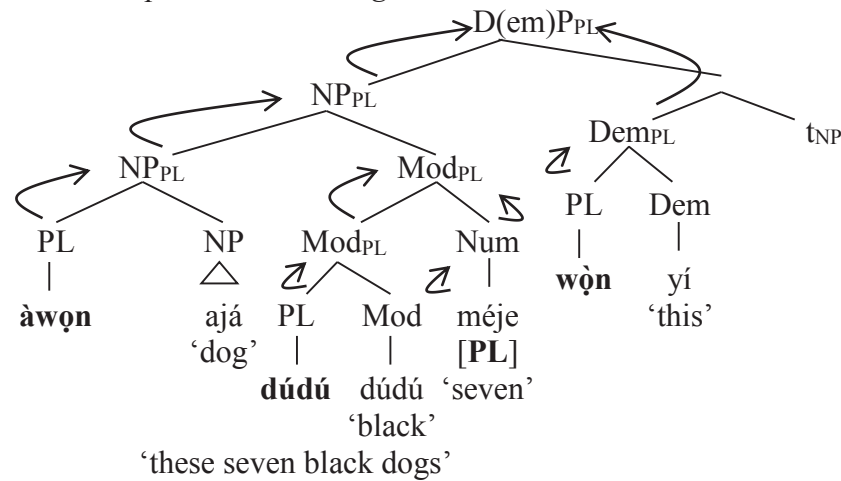
noun *ajá* ‘dog’ is marked for plural by *àwọn*. In addition the the noun is marked for plural by the numeral in (87a), the demonstrative, with the prefix *wọn-* (87b), the modifier by its COPY (87c), and in (87d), each entity within the whole nominal expression is marked for plural by the appropriate plural morpheme.

- (87) a.     **àwọn** *ajá*     **méje**  
           PL    dog     seven  
           ‘seven dogs’
- b.     **àwọn** *ajá*     **wọn-yí**  
           PL    dog     Dem-PL  
           ‘these dogs’
- c.     **àwọn** *ajá*     **dúdú** *dúdú*  
           PL    dog     COPY black  
           ‘black dogs’
- d.     **àwọn** *ajá*     **dúdú** *dúdú*   **méje** **wọn-yí**  
           PL    dog     COPY black   seven   Dem-PL  
           ‘these seven black dogs’

As with the account of cases where just one member of a nominal expression is marked for plural, these multiply marked NPs also involve percolation of the PLURAL feature. I demonstrate this in (88). In (88a), both the plural feature of *àwọn* and the abstract [PLURAL] feature in *méje* percolate their plural feature onto the NP. In (88b), plural percolation is realized on the NP through the plural word *àwọn* and the prefix *wọn-* of the demonstrative. In (88c), plural percolation comes via *àwọn* and the copied modifier *dúdú*. Lastly, in (86d), plural percolation comes via *àwọn*, the copied modifier *dúdú*, the abstract [PLURAL] feature from *méje* and the prefix *wọn-* of the demonstrative. The different arrows show the direction of the percolation.

- (88) a.     *Plural percolation through noun & Num*



b. *Plural-percolation through noun & Dem*c. *plural-percolation through noun & Mod*d. *Plural-percolation through noun, Mod, Num & Dem*

From the foregoing, it is clear that plural construals on nouns in Yorùbá divide into three interpretive classes as summarized in (89). Class 1 involves cases where an NP is not specified for number, in that context, the NP is interpreted as singular or

plural. Class 2 involves cases whereby a noun can be accompanied by either an unmarked demonstrative or the numeral “one” and the nouns are obligatorily interpreted as singular. Finally, class 3 divides into two sub-groups. On the one hand are cases where bare nouns are either accompanied by a numeral that is greater than “one” or a quantifier. On the other hand are cases where a dedicated plural morpheme occurs with N. In all of these, the NPs are obligatorily interpreted as plural.

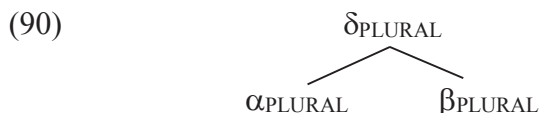
(89) *A summary of the analysis*

| CLASS | Syntactic context    | Interpretation        |
|-------|----------------------|-----------------------|
| 1     | N                    | SINGULAR OR<br>PLURAL |
|       | N + Mod              |                       |
| 2     | N + Dem              | SINGULAR              |
|       | N + Num 1            |                       |
| 3     | (i) N + Num >1       | PLURAL                |
|       | N + Q                |                       |
|       | (ii) PL-N + Dem/Mod  |                       |
|       | N + PL-Dem/PL-Mod    |                       |
|       | PL-N + PL-Dem/PL-Mod |                       |

This catalogues the various ways in which Yorùbá nouns come to be interpreted as singular or plural. What remains to be discussed is how the feature percolation mechanism adopted in the account for Yorùbá contrasts with feature matching. After laying out feature matching mechanism, I use English as a case study.

### 6.3.5 Feature percolation versus feature matching

Feature matching is a mechanism whereby plurality is marked on all members of a nominal expression. In a language like English, which makes use of this mechanism, the way it works is as follows. Let  $\delta$  be the NP and  $\alpha$  and  $\beta$  be constituents under  $\delta$ . If  $\delta$  is plural, then both  $\alpha$  and  $\beta$  must be plural (cf. Yang 2004, Wiltschko 2004).



There are four environments that can be examined in English to illustrate feature matching, as shown in (91).

(91) a. noun demonstrative



- b. noun quantifier
- c. noun numeral
- d. noun determiner

I look at only one of the cases, namely noun-demonstrative since it presents an interesting contrast with the facts of Yorùbá already accounted for. If a noun in English takes a demonstrative, both must match with respect to number. When the noun is singular it can only take a singular demonstrative, (92a). On the other hand, a singular noun cannot take a plural demonstrative, (92b).

- (92) a. **this** book  
 b. **\*this** book-s

Further, when the demonstrative is in the plural form, the noun and the demonstrative must agree with respect to plural marking (93).

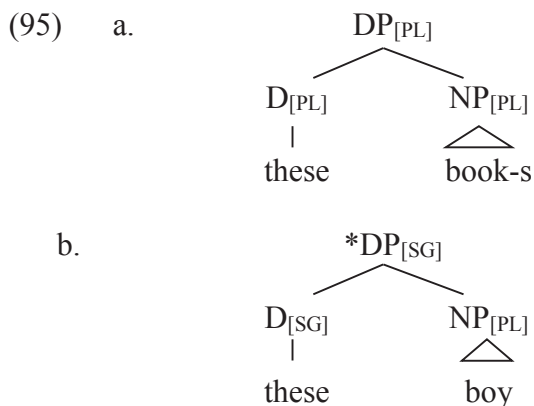
- (93) a. **these** books  
 b. **\*these** book

The effect that we see in (93) is referred to as concord or agreement in the literature (Corbett 2000, Wiltschko 2004, 2005; Yang 2004 among others). In the current account I analyze English plural marking as an instance of feature matching. This means all members of a nominal expression must have the same number feature. The facts of (92) and (93) are illustrated in (94) and (95). In (94a), the demonstrative *this* and the noun *book* have the same number feature in that they both share the singular feature hence feature-matching is observed. However, in (94b) where the singular demonstrative *this* combines with the plural noun *books*, feature-matching is not observed and this leads to ungrammaticality.

- (94) a. 
$$\begin{array}{c} \text{DP}_{[\text{SG}]} \\ \swarrow \quad \searrow \\ \text{D}_{[\text{SG}]} \quad \text{NP}_{[\text{SG}]} \\ | \quad \triangle \\ \text{this} \quad \text{book} \end{array}$$
- b. 
$$\begin{array}{c} \text{*DP}_{[\text{PL}]} \\ \swarrow \quad \searrow \\ \text{D}_{[\text{SG}]} \quad \text{NP}_{[\text{PL}]} \\ | \quad \triangle \\ \text{this} \quad \text{book-s} \end{array}$$

Similarly, in (95a), the demonstrative *these* and the noun *books* observe feature

matching in that they both share the plural feature. On the other hand, in (95b) where the plural demonstrative combines with the singular noun, it violates feature-matching, hence the ungrammatical output.



Crucially, Yorùbá differs from English in that nouns need not agree with demonstratives in terms of plural marking. As shown in (96b), only the noun is marked for plural by *àwọn* whereas the demonstrative remains unmarked and the whole NP is interpreted as plural. In the same way, in (97b), only the demonstrative and not the noun is marked for plural by *wọ̀n-* and the output is well-formed.

|      |    |               |              |                  |              |                            |
|------|----|---------------|--------------|------------------|--------------|----------------------------|
| (96) | a. | ajá           | yí           |                  | NP           | DEM                        |
|      |    | dog           | DEM          |                  |              |                            |
|      |    | 'this dog.'   |              |                  |              |                            |
|      | b. | <b>àwọn</b>   | ajá          | yí               | <b>PL-NP</b> | DEM                        |
|      |    | PL            | dog          | DEM              |              |                            |
|      |    | 'these dogs.' |              | (cf. *this dogs) |              |                            |
| (97) | a. | <b>àwọn</b>   | ajá          | <b>wọ̀n-</b>     | yí           | <b>PL-NP</b> <b>PL-DEM</b> |
|      |    | PL            | dog          | PL               | DEM          |                            |
|      |    | 'these dogs.' |              |                  |              |                            |
|      | b. | ajá           | <b>wọ̀n-</b> | yí               | NP           | <b>PL-DEM</b>              |
|      |    | dog           | PL           | DEM              |              |                            |
|      |    | 'these dogs.' |              | (cf. *these dog) |              |                            |

The disparity between English and Yorùbá is straightforwardly accounted for by assuming that while Yorùbá makes use of feature percolation, English adopts feature matching. The table below further illustrates the similarities and differences between the two languages in relation to how demonstratives and nouns interact.

(98) *Plural marking on noun-demonstrative in Yorùbá & English*

|    |                                     | Yorùbá | English |
|----|-------------------------------------|--------|---------|
| a. | DEM + N                             | √      | √       |
| b. | DEM + N <sub>PL</sub>               | √      | x       |
| c. | DEM <sub>PL</sub> + N <sub>PL</sub> | √      | √       |
| d. | DEM <sub>PL</sub> + N               | √      | X       |

In conclusion, I have shown that feature percolation and feature matching yield different results with respect to the typology of number marking. When a language adopts the feature percolation mechanism, marking plural on all the entities within an NP is optional. This is what Yorùbá does. By contrast when a language makes use of the feature matching mechanism, it becomes obligatory for all members of an NP to agree with respect to the plural feature. This is what English does. This analysis thus explains why Yorùbá but not English, can have phrases such as ‘this dogs’ and ‘these dog’.

#### 6.4 Comparing analyses

I review two different types of previous analyses of plural marking and assess them with respect to the Yorùbá data that I have analyzed. These are the plural parameter proposed in Déprez (2004) and inflectional versus modificational plural marking proposed in Wiltschko (2004, 2005).

##### 6.4.1 The plural parameter (Déprez 2004)

Déprez’s (2004) Plural Parameter, which is a development of an earlier proposal (Déprez 1999, 2001) using a morphosyntactic parameter, distinguishes two broad sets of languages: [+PL] languages and [–PL] languages. According to that approach, languages are grouped based on whether or not the structure of their nominal expressions obligatorily includes a functional projection for number. Déprez’s approach treats all languages that do not have inflectional morphology for plural as [–PL]. On this view, in [+PL] languages, number must project whereas in [–PL] languages, “the projection of NumP is optional and when it occurs, NumP does not have to contain a counter” (Déprez 2004: 10). The consequence of this proposal according to Déprez is three-fold:

- 
- (99)a. Only [-PL] languages allow direct access to the basic kind denotation of nouns. For  
       [+PL] languages, access to the kind denotation requires the presence of a  
       relevant  
       operator.
- b. Only [-PL] languages can have bare nominals that are under-specified for  
       number and  
       thus compatible with either a plural or a singular construal depending on  
       contextual factors.
- c. In [+PL] languages, in the absence of relevant morphology, bare ‘singular’  
       nominals, i.e., NumPs that contain an unsaturated counter, are excluded.  
       (Déprez 2004: 13).

Going by Déprez’s classification, Yorùbá is a [-PL] language. Her claim that bare nominals in such languages are under-specified for number and thus compatible with either a plural or a singular construal depending on contextual factors is in line with the facts of Yorùbá presented in §6.1. Just to remind readers, consider (100) where the bare noun *erin* can be construed as either singular or plural.

- (100) Mo      rí      **erin**      ní      ọgbà    ẹranko  
       1sg    see    elephant    garden animal  
       = ‘I saw an elephant in the zoo.’  
       = ‘I saw elephants in the zoo.’

However, despite the fact that Déprez claims that in a [-PL] language the projection of NumP is optional, her analysis makes no predictions regarding the actual deployment of PLURAL features in a [-PL] language. As I demonstrated in §6.2-6.3, [-PL] languages like Yorùbá use feature percolation to mark plural. This differentiates Yorùbá from [+PL] languages such as English where PLURAL must satisfy feature matching (i.e. agreement).

#### 6.4.2 Plural marking as a functional head or as a modifier (Wiltschko 2004, 2005)

The other account of plural marking that I examine is one that draws a distinction between plural marking as a functional head or via modification. My particular focus is on Wiltschko (2004, 2005).

### 6.4.2.1 Plural marking as a functional head

Using English as an example of a language where plural is inflectional Wiltschko (2004, 2005) argues that in languages with plural marking as a functional head, the functional head takes a noun as its complement as in (101).

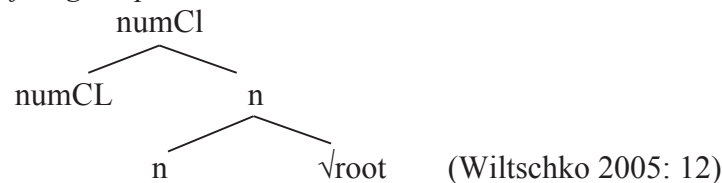
- (101) [<sub>numCl</sub> [**Plural**]<sub>numCl</sub> N N]] (Wiltschko 2005: 5)

In particular, she claims that plural marking is associated with the functional head *num(eral) Cl(assifier)*. The other significant thing about languages of this type is that number marking requires that there be number agreement on all the elements within a nominal phrase.<sup>53</sup> The following examples illustrate this idea.

- (102) *Obligatory plural marking in English phrases*

- a. the two men
- b. \*the two man

- (103) *Structure of English pluralized nouns*



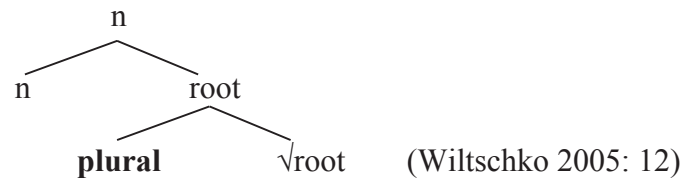
Arguing for (101), Wiltschko (2005:12) claims that plural marking in a language like English “instantiates a functional head (*numCl*) and is therefore obligatory due to a so called (Exceptional Projection Principle) EPP-effect.” She goes further by claiming that the category of the plural marker (*numCl*) projects and is thus syntactically transparent. This is what accounts for the obligatory agreement of number.

### 6.4.2.2 Plural marking as a modifier

For Wiltschko, modificational plural marking arises when plural marking is optional. In Halkomelem, where plural marking is not inflectional, the plural marker modifies roots. Wiltschko proposes that plural, as a modifier, is adjoined to category neutral root (Wiltschko 2005:11). This idea is illustrated in (104).

<sup>53</sup> Cf. Corbett (2000) who observes that there are two types of agreement that exist between the controller (noun) and the target modifiers, which plural form is determined by the noun. The two are **syntactic** and **semantic** agreement. Corbett’s claim is that the **form** determines the syntactic agreement while semantic agreement is determined by the **meaning** (p. 178).

(104) *Structure of Halkomelem pluralized nouns:*



This structure accounts for the data in (105) and (106). First, observe that plural marking on the root is optional and a noun that is marked for plural is compatible with a preceding plural marked determiner (105a). However, the noun does not require the determiner to be marked for plural before it is interpreted as plural, (106b).

(105) *Optional plural marking in Halkomelem phrases*

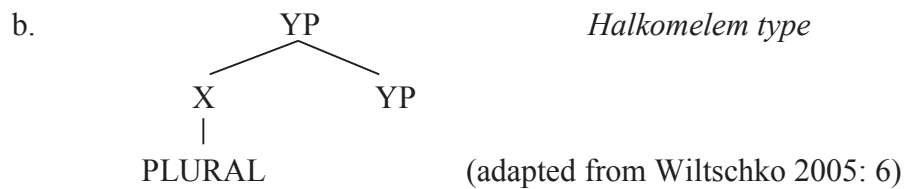
- a. t'ílém **ye**      **sí:wí:qe**  
 sing   det.pl   man-pl  
 'The men are singing.'
- b. t'ílém **te**      **sí:wí:qe**  
 sing   det   man-pl  
 'The men are singing.'

- (106) a. t'ílém **ye**      **swíyeqe**  
 sing   det.pl   man  
 'The men are singing.'
- b. t'ílém **te**      **swíyeqe**  
 sing   det   man  
 'The man is singing.'
- (Wiltschko 2005: 3)

One significant thing about “plural marking as a modifier” is that it is not subject to the Exceptional Projection Principle (EPP) as it is with “plural marking as a functional head”. The structural difference between plural marking as a functional head or as a modifier is given as (107). The structure in (107a) illustrates English type of language where X is the Number (the head) and Y is the noun (the complement). In contrast, (107b) illustrates Halkomelem type of language X as a modifier does not project and as such it only adjoins to Y (the noun).

- (107) a. *English type*
- ```

graph TD
    XP[XP] --- X[X]
    XP --- YP[YP]
    X --- PLURAL[PLURAL]
  
```



Concluding, Wiltschko claims “the obligatoriness of Number-marking in English is consistent with its inflectional status whereas the optionality of plural marking in Halkomelem suggests that we are not dealing with an inflectional category” (Wiltschko 2004:3, 2005:11).

Of the two mechanisms discussed by Wiltschko, the plural marking as a modifier approach easily extends to Yorùbá: Yorùbá is not an inflectional language therefore its number marking cannot project to a functional phrase. So Wiltschko’s proposal should be able to account for Yorùbá data. This account is also consistent with my account, which treats plural words as adjuncts. However, Wiltschko’s account falls silent regarding the actual deployment of plural morphemes in nominal expressions. I have shown that there is a way by which both inflection-based (syntactic) and modification based (semantic) analyses converge using feature-based mechanisms. Under this approach, the inflection-based analysis is accounted for using the feature matching mechanism, which requires that there be feature agreement within all members of a nominal expression. The modification-based approach is analyzed as feature-copying where the plural feature is copied from a lower node to a higher node (feature percolation).

One advantage of my proposal is that it does not really matter whether or not the plural word is a functional head. What determines plural interpretation is the “copy” mechanism involved. When plural is morphologically marked, the feature matching mechanism as expressed by the notion of agreement is applicable. On the other hand, when plural words are used, feature percolation is enforced.

6.5 Conclusion

This chapter has accounted for the various strategies that Yorùbá adopts in plural marking. The general picture that emerges is that plural can be marked in one of three ways: contextually, semantically, or morphologically. I have shown that when a noun occurs by itself or when it takes a modifier, its construal as singular or plural is sensitive to context. Secondly, I have analyzed quantifiers and numerals as lexical items with an abstract PLURAL feature, which percolates onto the NP. This is what I describe as an instance of semantically conditioned plurality. The third claim is that plural is also marked by certain morphemes, which can be realized either on the

noun (in the form of *àwọ̀n*) or on a modifying element (in the form of reduplication) or on demonstratives (in the form of *wọ̀n-*).

The analysis of plural marking proposed for Yorùbá makes a prediction that there are two ways by which languages may mark their nouns for plural. Languages that show agreement will use plural feature matching while languages that do not show agreement will use plural feature percolation.

References

- Abney, Stephen Paul. 1987. *The English Noun Phrase in its Sentential Aspect*. Doctoral Dissertation. MIT.
- Aboh, Enoch Olabode. 1999. *From the Syntax of Gungbe to the Grammar of Gbe*. Doctoral Dissertation. University of Geneva.
- Aboh, Enoch Olabode. 2004. *The Morphosyntax of Complement-Head Sequences: Clause Structure and Word Order Patterns in Kwa*. New York: Oxford University Press.
- Aboh, Enoch Olabode. 2005. Clause Structure and Word Order in Kwa. LOT Winter school, University of Gronigen.
- Abraham, R.C. 1958. *Dictionary of Modern Yoruba*. University of London Press.
- Adéşolá, Olúşèyẹ. 2001. A-bar Dependency in Logophoric Context. Ms. Rutgers State University, New Jersey.
- Adéwólé, Lawrence Olúfẹmi. 1989. Some Yoruba Quantifier Words and Semantic Interpretation: A Critique. *Studies in African Linguistics*. 20:79-88.
- Ajíbóyè, Oládiípò. 1991. *Atúnyèwò Fonólójì Mòbà. Moba Phonology Revisited*. Master's Thesis. University of Ilorin, Ilorin, Nigeria.
- Ajíbóyè, Oládiípò. 2001. The Internal Structure of Yorùbá DP. 32nd Annual conference of African Linguistics. University of California, Berkeley.
- Ajíbóyè, Oládiípò. 2004a. The Syntax and Semantics of Yorùbá Bare Nouns. Department of Linguistics Seminar Series. University of British Columbia.
- Ajíbóyè, Oládiípò. 2004b. The Syntax of Yorùbá Genitive Construction. 35th Annual Conference of African Linguistics. Harvard University, Boston.
- Ajíbóyè, Oládiípò. 2005a. The Syntax of Yorùbá Reflexive Epithets. *Journal of West African Languages*. 31:89-122.
- Ajíbóyè, Oládiípò. 2005b. Interpreting Bare nouns in Yorùbá. Berkeley Linguistics Society 31. University of California, Berkeley.
- Ajíbóyè, Oládiípò. 2005c. Aspects of Plural Marking in Yorùbá. 36th Annual Conference of African Linguistics. Georgia Southern University. Savannah .
- Ajíbóyè, Oládiípò, Rose-Marie Déchaine and Osamuyi Stewart. 2003. The Syntax of Nominalization in Èdó and Yorùbá. In *New Trends in African Linguistics* 6:1-15.

- Ajíbóyè, Oládiípò and Rose-Marie Déchaine. 2004. The Syntax and Semantics of Yorùbá Duplicative Constructions: 35th Annual Conference of African Linguistics. Harvard University, Boston.
- Ajíbóyè, Oládiípò. Rose-Marie Déchaine, Bryan Gick and Douglas Pulleyblank. 2004. Disambiguating Yorùbá Tones: The Interface between Syntax, Morphology, Phonology and Phonetics. Ms. University of British Columbia.
- Akinlabí, Akínbíyí. 1985. *Tonal Underspecification and Yorùbá Tone*. Doctoral Dissertation, University of Ibadan, Nigeria.
- Akinlabí, Akínbíyí and Mark Liberman. 2000. The Tonal Phonology of Yoruba Clitics. In B. Gerlach and J. Grijzenhout, eds. *Clitics in Phonology, Morphology and Syntax*. Amsterdam: John Benjamins.
- Alexiadou, Artemis and Chris Wilder. 1998. Adjectival Modification and Multiple Determiners. In Alexiadou, Artemis and Chris Wilder, eds. *Possessors, Predicates and Movement in the Determiner Phrase*. Alexiadou, Artemis and Chris Wilder, eds. Amsterdam: John Benjamins Publishing Company, 303-332.
- Alexiadou, Artemis and Chris Wilder, eds. 1998. *Possessors, Predicates and Movement in the Determiner Phrase*. Amsterdam: John Benjamins Publishing Company.
- Awóbùlúyì, Oládélé. 1978. *Essentials of Yorùbá grammar*. Ìbàdàn: Oxford Press.
- Awóbùlúyì, Oládélé. 1995. Mọ̀fọ̀lọ̀jì Èdè Yorùbá. Lecture notes, University of Ilorin, Ilorin, 1-25.
- Awóbùlúyì, Oládélé. 2004. On the so-called Genitive Morpheme in Standard Yorùbá, read at the 24th WACL, University of Ibadan, Nigeria. August 1-6.
- Awóyalé, Yíwọ́lá. 1974. *Studies in the Syntax and Semantics of Yorùbá Nominalizations*. Doctoral Dissertation. University of Illinois, Urbana-Champaign.
- Awóyalé, Yíwọ́lá. 1985. Focus as an Unbounded Movement Rule in Yorùbá. *Journal of the Linguistic Association of Nigeria* 3: 745-84.
- Bach, Emmon. 1981. On Time, Tense and Aspect: An Essay in English Metaphysics. In P. Cole, ed. *Radical Pragmatics*. 63-81. New York: Academic Press.
- Bámgbóṣé, Ayò. 1966. *A Grammar of Yorùbá*. London: Cambridge University Press.
- Bámgbóṣé, Ayò. 1967. *A Short Yorùbá Grammar*. London: Cambridge University Press.
- Bámgbóṣé, Ayò. 1986. Yorùbá: A Language in Transition. Lagos: J.F. Odunjo memorial lectures organizing committee.

- Bámgbósé, Ayò. 1989. When Rules Fail: The Pragmatics of Vowel Elision in Yorùbá. Linguistics Association of Nigeria conference, Jos.
- Bámgbósé, Ayò. 1990. *Fonólójì àti Gírámà Yorùbá*. Ibadan: University Press.
- Bámgbósé, Ayò. 2000. Coreferentiality and Focus in Textual Cohesion: Evidence from Yorùbá. *Journal of West African Languages*. 28(2):59-70.
- Barczak, Leszek. 2004. Syntax and Semantics of the Yorùbá Auxiliary *máa*. 34th Annual Conference of African Linguistics. Harvard University, Boston.
- Beck, David. 2005. Ideophones and Adverbs as Predicate-qualifiers. WSCLA 10.
- Benveniste, Emil. 1971. The Nominal Sentence. In *Problems in General Linguistics*. 132-144 (translated from French by M.E. Meed). Coral Gables, Florida: University of Miami Press [originally in *Bulletin de la Société de Linguistique de Paris* 46 (1950): 19-36].
- Bermúdez-Otero Ricardo & Kersti Börjars 2002. Markedness in Phonology and in Syntax: the Problem of Grounding.
- Bernstein, Judy. 1991. DPs in Walloon: Evidence for Parametric Variation in Nominal Head Movement. *Probus* 3:101-126.
- Bianchi, Valentina. 2000. The Raising Analysis of Relative Clauses: A Reply to Borsley. *Linguistic Inquiry* 31:123-140.
- Bisang Walter and Remi Sonaiya. 2000. Information Structuring in Yorùbá. *Linguistics* 38: 169-197.
- Bittner Maria and Ken Hale. 1995. The Structural Determination of Case and Agreement. *Linguistic Inquiry* 18:1-44
- Borer, Hagit. 2001. One is the Loneliest Number. Handout, University of Southern California.
- Borer, Hagit. 2004. In Name only: an Exo-skeletal Trilogy Book 1. Ms. University of Southern California
- Bowers, J. 1993. The Syntax and Semantics of Nominals. In *Proceedings of SALT-III* 3:1-30.
- Borsley, Roberts D. 1997. Relative Clauses and the Theory of Phrase Structure. *Linguistic Inquiry* 28:624-647.
- Borsley, Roberts D. 2001. More on the Raising Analysis of Relative Clauses. Ms. University of Essex.
- Burton, S. 1995. *Six Issues to Consider when Choosing a Husband*. Doctoral Dissertation, Rutgers University.
- Burzio, L. 1986. *Italian Syntax: A Government-Binding Approach*. Hingham, MA: Kluwer.
- Cardinaletti, Anna. 1998. On the Deficient/Strong Opposition in Possessive Systems. In Alexiadou, Artemis and Chris Wilder, eds. *Possessors, Predicates*

- and Movement in the Determiner Phrase. Alexiadou, Artemis and Chris Wilder, eds. Amsterdam: John Benjamins Publishing Company, 17-54.
- Carlson, Gregory N. 1977. A Unified Analysis of the English Bare Plural, *Linguistic and Philosophy* 3:413-458.
- Carlson, Gregory N. 1979. Generic and Atemporal when. *Linguistic and Philosophy* 3:49-98
- Carlson, Gregory N. 1980. *Reference to Kinds in English*. Doctoral Dissertation, University of Massachusetts, Amherst. New York: Garland Press.
- Carlson, Gregory. 1982. Generic Terms and Generic Sentences. *Journal of Philosophical Logic* 11:145-181.
- Carlson, Gregory N and Francis Jeffrey Pelletier 1995, eds. *The Generic Book*. Chicago: The University of Chicago Press.
- Carsten, Vicki. 1986. *Proper Government in Yorùbá*. University of California, Los Angeles. M.A. thesis.
- Carsten, Vicki. 2003. Rethinking Complementizer Agreement: Agree with a Case-checked Goal. *Linguistic Inquiry* 34:393-412.
- Cheng, Lisa Lai-Shen and Rint Sybesma 1999. Bare and not-so-bare Nouns and the Structure of NP. *Linguistic Inquiry* 30:509-542.
- Chierchia, Gennaro. 1995. Individual Level Predicates as Inherent Generics. In *The Generic Book*. G. Carlson and F. Pelletier (eds.), 176-223.
- Chierchia, Gennaro. 1998. Plurality of Mass Nouns and the Notion of "Semantic Parameter". In Susan Rothstein (ed.). *Events and Grammar*. Netherlands: Kluwer Academic Publishers, 53-103.
- Chierchia, Gennaro. 2005. Substance, Object and Number. Harvard University, Boston.
- Chomsky Noam and Morris Halle. 1968. *The Sound Pattern of English*.
- Chomsky Noam, 1981. *Lectures on Government and Binding*. Dordrecht: Foris Publications.
- Chomsky, Noam. 1991. Some Notes on Economy of Derivation and Representation. In *Principles and Parameters in Comparative Grammar*, ed. Robert Freidin, 417-454. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 1993. A Minimalist Program for Linguistic Theory. In K. Hale and S.J. Keyser, (eds.), *The View from building 20: Essays in Linguistics in Honor of Sylvain Bromberger*, 1-52. Cambridge, Mass.: MIT Press.
- Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge, Mass.: MIT Press.
- Chumbo, Beban Sammy. 1982. Contraction and Tone Polarization in Ogori. *Journal of West Africa Languages* 12:89-103.

-
- Cinque, Guglielmo. 1990. Ergative Adjectives and the Lexicalist Hypothesis *Natural Language and Linguistic Theory* 8:1-39.
- Cinque, Guglielmo. 1994. On the Evidence for Partial N-movement in the Romance DP. In Guglielmo Cinque, Jan Koster, Jean-Yves Pollock, Luigi Rizzi and Raffaella Zanuttini, eds. *Paths towards Universal Grammar*. Georgetown: University Press.
- Cinque, Guglielmo. 2003. The Pronominal Origin of Relative Clauses. Ms. University of Venice.
- Cinque, Guglielmo. 2004. Introduction to Internal structure of DP. Ms. University of Venice.
- Cinque, Guglielmo. 2005a. The Internal Syntax of DPs (with Special Reference to Adjectives and Relative Clauses) TR 1:00-2:40.
- Cinque, Guglielmo. 2005b. Deriving Greenberg's Universal 20 and its Exceptions. *Linguistic Inquiry* 36:315-332.
- Cohen, Ariel. 2004. Existential Generics. *Linguistics and Philosophy* 27:137-168. Netherlands: Kluwer Academic Publishers.
- Cook, Clare. 2004. Adjunct Extraction in Nêhiyawêwin and Yorùbá: Neither Adjunction nor Extraction. Ms. University of British Columbia.
- Corbett, Greville. 2000. *Number*. Cambridge: Cambridge University Press.
- Couquaux, Daniel. 1982. French Predication and Linguistic Theory. In R. May and J. Koster. (eds). *Levels of Syntactic Representation*. 33-64. Dordrecht: Foris.
- Cysouw, Michael. In press. A Typology of Honorific Uses of Clusivity. In Elena Filimonova, ed. *Clusivity*. Amsterdam: Benjamins.
- Déchaine, Rose-Marie. 1993. *Predicates across Categories: Towards a Category-Neutral Syntax*. Doctoral Dissertation. University of Massachusetts, Amherst.
- Déchaine, Rose-Marie. 1997. On the Left Edge of Yorùbá Complements. Paper presented at the University of Ibadan seminar series.
- Déchaine Rose-Marie. 1999. What Algonquian MMorphology is Really Like: Hockett Revisited, in Bar-el, Leora, Rose-Marie Déchaine, and C. Reinholtz, eds. *Proceedings from the Workshop on the Structure and Constituency in Native American Languages*, 25-72. MIT Occasional papers in Linguistics 17, Cambridge, Massachusetts.
- Déchaine, Rose-Marie. 2001. On the Left Edge of Yorùbá Complements. *Lingua* 111: 81-130.
- Déchaine Rose-Marie and Victor Manfredi. 1998. SVO Ergativity and Abstract Ergativity. *Recherches linguistiques de Vincennes* 27: 71-94.
- Déchaine, Rose-Marie. and Martina Wiltschko. 2002a. Decomposing Pronouns. *Linguistic Inquiry*. 33: 409-442.

-
- Déchaine, Rose-Marie and Martina Wiltschko. 2002b. Deriving Reflexives. *WCCFL 21 Proceeding*. Mikkelsen, L. and C. Potts. eds. 71-84. Somerville, MA: Cascadilla Press.
- Delfitto, Dennis 2002. *Genericity in Language. Issues of Syntax, Logical Form and Interpretation*. Edizioni dell'Orso, Alessandria.
- Delsing, Lars-Olof. 1998. Possession in German. In Alexiadou, Artemis and Chris Wilder, eds. *Possessors, Predicates and Movement in the Determiner Phrase*. Alexiadou, Artemis and Chris Wilder, eds. Amsterdam: John Benjamins Publishing Company, 93-108.
- Déprez Viviane. 1999. De la Nature Sémantique des Nominaux sans Determinant en Créole Haitien. *Langue* 2:289-300. John Libbey Eurotext, Agence Universitaire de La Francophonie.
- Déprez Viviane. 2001. On the Syntactic and Semantic Nature of Haitian Bare NPs. In: Cresti, Tortora and C. Saterfield, T. (eds.), *Current issues in Romance linguistics: Selected Papers from the 29th Linguistics Symposium on Romance Languages*. Amsterdam: John Benjamins.
- Déprez Viviane. 2004. Morphological Number, Semantic Number and Bare Nouns. *Lingua*. 30: 1-27.
- Diesing, Molly. 1992. *Indefinites*. Linguistic Inquiry Monograph Twenty, Cambridge: MIT Press.
- Doherty Monika. 2005 Language-specific Conditions for Discourse Linking and Appropriateness. *Linguistics* 43:1-15.
- Dowty, David. 1979. *Word Meaning and Montague Grammar*. Dordrecht: Kluwer.
- Dryer, Mathew. 1989. Plural Words. *Linguistics* 27:865-895.
- Dusterhoff, Kurt. 1997. Stage/Individual Level Predicates. Tue Jul 15 09:44:31 BST 1997.
- Enç, Mürvet. 1991. The Semantics of Specificity. *Linguistic Inquiry* 22:1-25.
- Fágúwà, Daniel. 1961. *Àdìtù Olódùmarè*. London: Nelson.
- Fodor, Janet Dean. 1970. *The Linguistic Description of Opaque Contexts*. New York: Garland.
- Fodor, Dean Janet and Ivan Sag 1982. Referential and Quantificational Indefinites.
- Freeze, Ray. 1992. Existentials and other Locatives. *Language* 68:553-596.
- Fukui, Naoki. 1995. The Principles-and-Parameters Approach: A Comparative Syntax of English and Japanese. In M. Shibatani and T. Bynon ed. *Approaches to Language Typology*. 327-72. Oxford: Oxford University Press.
- Fukui, Naoki. 1986. *A Theory of Category Projection and its Applications*. Doctoral Dissertation, MIT.

-
- Ghomeshi Jila, Ray Jackendoff, Nicole Rosen and Kevin Russell. 2004. Contrastive Focus Reduplication in English (The Salad-salad paper). *Natural Language and Linguistic Theory* 22: 307-357.
- Giannakidou, Anastasia. 1998. *Polarity Sensitivity as (Non)Verdical Dependency*. Amsterdam. John Benjamins Publishing Company.
- Greenberg, Yael. 1998. An Overt Syntactic Marker for Genericity in Hebrew. In Rothestein, Susan, ed. *Events and Grammar*. Netherlands: Kluwer Academic Publishers.
- Haegeman, L. 1991. *Introduction to Government & Binding Theory*. New York: Blackwell.
- Haegeman, L. 1994. *Introduction to Government and Binding Theory* 2nd ed. Blackwell.
- Harley, Heidi Britton. 1995. *Subjects, Events and Licensing*. Doctoral Dissertation. MIT Press.
- Haspelmath, Martin. 1997. *Indefinite Pronouns*. Oxford. Clarendon Press.
- Haunz, Christine. 2004. Perceived Similarity: Universal or Language-dependent? 9th Conference on Laboratory Phonology.
- Hayward, Richard J. 1979. Bayso Revisited: Some Preliminary Linguistic Observations II. *Bulletin of the School of Oriental and African Studies*. University of London 42:101-132.
- Heim, Irene. 1982. *The Semantics of Definite and Indefinite Noun Phrases*. Doctoral Dissertation. University of Massachusetts. Amherst.
- Heim, Irene. 1988. *The Semantics of Definite and Indefinite Noun Phrases*. New York: Garland Publishing.
- Heim, Irene. 2002. File Change Semantics and the Familiarity Theory of Definiteness. In Portner Paul and Barbara Partee, eds. *Formal Semantics: The Essential Readings* New York: Blackwell Publishing
- Hellan, Lars. 1981. An Argument for a Transformational Derivation of Passives. In A. Belletti, L. Brandi, and L. Rizzi eds. *Theory of Markedness in Generative Grammar: Proceedings of the 1979 GLOW conference*. Pisa: Scuola Normale Superiore, 217-285.
- Hertz, Anna. 1997. On the Dual Nature of the 'Possessive' Marker in Modern English. *Journal of Linguistics* 33:511-537.
- von Heussinger, Klaus. 2002. Specificity and Definiteness in Sentence and Discourse Structure. *Journal of Semantics* 19:245-274.
- Higginbotham, James. 1985. On Semantics. *Linguistic Inquiry* 16:547-93.

- Hoekstra, Teun. 1994. 'HAVE' as BE plus or minus'. In Cinque Guglielmo, Jan Koster Jean-Yves Pollock, Luigi Rizzi and Raffaella Zanuttini eds. *Paths Towards Universal Grammar*. Georgetown: University Press.
- Ionin, Tania and Ora Matushansky. 2004. A Singular Plural to Appear in B. Schmeiser, V. Chand, A. Kelleher and A. Rodriguez (eds.), *Proceedings of WCCFL 23*, UC Davis.
- Ioup Georgette. 1997. Setting Versus Resetting a UG Parameter: Evidence from a Chinese Learner of English. International Speakers Series, Department of Linguistics, University of Durham, UK, April 1997.
- Jersperson Otto. 1924. *The Philosophy of Grammar*. London: Allen and Unwin.
- Kamp, Hans. 1981. A Theory of Truth and Semantic Representation. In Jeroen Groenedijk, Theo Janssen and Martin Stokhof, eds. *Formal Methods in the Study of Language: Proceedings of the Third Amsterdam Colloquium*, Part I, Amsterdam: Mathematical Centre, 277-321.
- Kamp, Hans. 1988. *The Semantics of Definite and Indefinite Noun Phrases*. New York: Garland Publishing, Inc.
- Kamp Hans and Uwe Reyle. 1993. *From Discourse to Logic: Introduction to Model theoretic Semantics of Natural Languages, Formal Logic and Discourse Representation Theory Part 2*. Netherlands: Kluwer Academic Publishers.
- Kayne, Richard. 1994. *The Antisymmetry of Syntax*. Cambridge: MIT Press.
- Kayne, Richard. 1993. Toward a Modular Theory of Auxiliary Selection. *Studia Linguistica* 47:3-31.
- Keenan, E. L. 1985. Relative Clauses. Complex Constructions. In T. Shopen, ed. *Language Typology and Syntactic Description*. 2:141-170. Cambridge: University Press.
- Kiss, É. Katalin. 1998. On Generic and Existential Bare Plurals and the Classification of Predicates. In Susan Rothstein, ed. *Studies in Linguistics and Philosophy: Events and Grammar*, 45-162.
- Kiss, É. Katalin. 2005. Event Types and Discourse Linking in Hungarian. *Linguistics* 43:131-154.
- Koch, Karsten A. 2004. Any Bad Noun: N-kí-N in Yorùbá. 35th Annual Conference on African Linguistics. Harvard University, Boston.
- Koch, Karsten A. 2005. N-kí-N in Yorùbá and the Semantics of "any". Berkeley Linguistics Society 31, University of California, Berkeley.
- Koopman, Hilda. 2000. The spec head configuration. In *The Syntax of Specifiers and Heads: Collected Essays of Hilda J. Koopman*. Routledge.

-
- Kratzer, Angelika. 1995. Stage Level and Individual Level Predicates. In G. Carlson and J.F. Pelletier, eds. *The Generic Book*. Chicago: University of Chicago Press.
- Landman, Fred. 2000. *Events and Plurality: The Jerusalem Lectures*. Amsterdam: Kluwer Academic Publishers.
- Landman, Fred. 2004. *Indefinites and the Type of Sets*. Blackwell Publishing.
- Láníran, Yétúndé. 1992. *Intonation in Tone Languages: The Phonetic Implementation of Tones in Yorùbá*. Doctoral Dissertation. Cornell University, Ithaca.
- Lasnik, Howard. 2000. Subjects, Objects and the Extended Projection Principle. www-linguistics.stanford.edu/colloq/2000/2000feb04.html
- Lawal, Nike. 1986. Some Yoruba Quantifier Words and Semantic Interpretation. *Studies in African Linguistics* 17:95-105.
- Lawal, Nike. 1989. Some Yoruba Quantifier Words and Semantic Interpretation: A Reply to a Critique. *Studies in African Linguistics* 20:89-92.
- Leben, W. 1973. *Suprasegmental Phonology*. New York: Garland.
- Lee, Jeong-Shik. 1995. The Role of Case in Exceptional Case Marking. *Studies in Generative Grammar* 5:265-317.
- Levinson, Dmitry. 2005. Gradual Uniqueness Effect. 6th annual SemFest.
- Longobardi, Giuseppe 1994. Reference and Proper Names: A Theory of N-Movement in Syntax and Logical Form. *Linguistic Inquiry* 25:609-665.
- Lindauer, Thomas. 1998. Attributive Genitive Constructions in German. In Alexiadou, Artemis and Chris Wilder, eds. *Possessors, Predicates and Movement in the Determiner Phrase*. Alexiadou, Artemis and Chris Wilder, eds. Amsterdam: John Benjamins Publishing Company, 109-140.
- Longobardi, Giuseppe 2000a, The Structure of DPs: Principles, Parameters and Problems. In Mark Baltin and Chris Collins, eds. *Handbook of Syntactic Theory*, Cambridge, MA: Blackwell.
- Longobardi, Giuseppe. 2000b, Postverbal Subjects and the Mapping Hypothesis. *Linguistic Inquiry* 31:691-702.
- Longobardi, Giuseppe. 2003. Toward a Unified Grammar of Reference. To appear. In *Zeitschrift für Sprachwissenschaft*.
- Longobardi, Giuseppe. 2004. The Structure of DPs: Some Principles, Parameters, and Problems. In *The Handbook of Contemporary Syntactic Theory*. Mark, Baltin and Chris Collins, eds. 562-603. New York: Blackwell Publisher.
- Ludlow, Peter and Stephen Neale 1991. Indefinite Descriptions: In Defense of Russell. *Linguistics and Philosophy* 14:171-202.

-
- MacDonald, Jonathan E. 2004. Spanish Reflexive Pronouns: a Null Preposition Hypothesis. *WCCFL 23 Proceedings*, ed. G. Garding and M. Tsujimura, Somerville, MA: Cascadia Press. <http://www.sinc.sunysb.edu/Stu/jmacdona/pdfs/Wccfl%2023%20proceedings%20draft%20for%20webpage>.
- McShane Marjorie and Sergei Nirenburg. 2003. Parameterizing and Eliciting Text Elements across Languages for Use in Natural Language Processing Systems. Ms. University of Maryland, Baltimore County.
- Manfredi, Victor. 1987. Anti-logophoricity as Domain Extension in Igbo and Yorùbá, in Manfredi ed. *Niger-Congo Syntax & Semantics* 1:97-113.
- Manfredi, Victor. 1992. A Typology of Yorùbá Nominalizations. In Collins, Chris and Victor Manfredi, eds. *Proceedings of the Kwa Comparative Syntax Workshop*. MIT Working Papers in Linguistics.
- Manfredi, Victor. 1994. Syntactic (De)composition of Yorùbá 'be' and 'have', éditées par L. Nash and G. Tsoulas, 237-52. *Langues et Grammaire; Actes du Premier Colloque*. Département des Sciences du Langage, Université Paris.
- Manfredi, Victor. 1995. Inflection by Default. *Niger-Congo and Semantics* 6:91-112.
- Martí, Palau. 1992. Note sur Langue et la Transcription.
- Matthewson, Lisa 1998. *Determiner Systems and Quantificational Strategies: Evidence from Salish*. The Hague Holland Academic Graphics.
- McCarthy, John J. and Alan S. Prince 1993. Optimality in Prosodic Morphology: The Emergence of the Unmarked. Handout from the talk presented at the NELS 24. University of Massachusetts, Amherst.
- McCarthy, John J. and Alan S. Prince 1994. Emergence of the Unmarked. Unpublished Ms, University of Massachusetts and Brandeis University.
- Milsark, Gary. 1974. *Existential Sentences in English*. Doctoral Dissertation MIT.
- Moravcsik, Edith A. 1978. Reduplicative Constructions. In *Universal of Human Language* 3:297-334. Greenberg, Joseph H., Charles A. Ferguson and Edith A. Moravcsik, eds. Stanford: Stanford University Press.
- Moravcsik, Edith A. 1998. Classifiers and Plural Marking. Email document, 9 November 1998, Discussion List for The Association for Linguistic Typology.
- Moro, Andrea. 1995. *The Raising of Predicates*. Cambridge: University Press.
- Mortenson, D. 2003. Two Types of Variable Elements in Among Anaphora. Workshop on the Form and Function of Pronouns. University of British Columbia.
- Mühlbauer, Jeff. 2004. The Semantics of Possessor Relations in Nêhiyawêwin. Ms. University of British Columbia.

-
- Mühlbauer, Jeff. 2004. Three Kinds of Nominals in Yorùbá. *University of British Columbia Working Papers in Linguistics*.
- Mühlbauer, Jeff. 2004. Indefinite Relations and Possession in Plains Cree. Ms. University of British Columbia
- Müller, Ana. 2003. Generic Sentences with Indefinite and Bare Subjects in Brazilian Portuguese. In Jan Anderson, Paula Menéndez-Benito and Adam Werle, eds. *The Proceedings of SULA 2*:71-86.
- Nordlinger, Rachel. 1998. *Constructive Case: Evidence from Australian Languages*. Stanford, CA, CSLI Publications.
- Ọ̀lá Ọ̀láníkẹ̀. 1989. Yorùbá Vowel Deletion Revisited. Department of Linguistics and Nigerian Languages seminar series. University of Ilorin.
- Ọ̀lá Ọ̀láníkẹ̀. 1995. *Benue-Congo Prosodic Phonology and Morphology in Optimality Theory*. Doctoral Dissertation. University of British Columbia.
- Owólabí, Kòlá. 1995. More on Yorùbá Prefixing Morphology. In Owólabí, Kòlá, ed. *Essays in Honour of Ayò Bámgbóṣẹ̀*: 92-112.
- Oyèláràn, Ọ̀lášopé Oyèdìjì. 1970. *Yorùbá Phonology*. Doctoral Dissertation. Stanford: Stanford University.
- Oyèláràn, Ọ̀lášopé Oyèdìjì. 1982. On the scope of the Serial Verb Construction in Yorùbá. *Studies in African Linguistics* 13: 109-46.
- Oyèláràn, Ọ̀lášopé Oyèdìjì. 1989. Morphological and Syntactic Constraints on Verbal Auxiliaries in Yorùbá. 4th Niger-Congo Syntax & Semantics Workshop, Universiteit van Tilburg.
- Oyèláràn, Ọ̀lášopé Oyèdìjì. 1990. Vowel Elision in Yorùbá Revisited. 21st Annual Conference on African Linguistics. The University of Georgia.
- Partee, Barbara and Vladimir Borshev. 1999. Possessives, Favorite and Coercion. In Anastasia Riehl and Rebecca Daly, eds. *Proceedings of ESCOL99* 173-190. Ithaca, New York.
- Partee, Barbara and Vladimir Borshev. 2002. Existential Sentences, BE, and the Genitive of Negation in Russian. Conference on Existence: Semantics and Syntax. Nancy, Sept. 26.
- Postma, G. 1995. *Zero Semantics: A Study of the Syntactic Conception of Quantificational Meaning*. Holland Institute of Generative Linguistics.
- Pulleyblank, Douglas. 1986. *Tone in Lexical Phonology*. Dordrecht: Reidel.
- Pulleyblank, Douglas. 1986. Clitics in Yoruba. *Syntax and Semantics* 19. *The Syntax of Pronominal Clitics*.
- Pulleyblank, Douglas. 1988. Vocalic Underspecification in Yorùbá. *Linguistic Inquiry* 19:233-270.

- Pulleyblank, Douglas. 2002. Yorùbá Patterns of Reduplication. Ms. University of British Columbia.
- Pulleyblank, Douglas. 2004. A Note on Tonal Markedness in Yorùbá. *Phonology* 21:409-425. Cambridge: University Press.
- Pulleyblank, Douglas (in press) Patterns of Reduplication in Yorùbá, in Kristin Hanson & Sharon Inkelas, eds. *The Nature of the Word: Essays in Honor of Paul Kiparsky*. The MIT Press.
- Pylkkänen, Liina. 2000. Representing Causatives. In Jackson, B. and T. Matthews, eds. *Proceedings*. CLC Publications. Cornell University, Ithaca, NY.
- Radford, Andrew. 1997. *Syntax: A Minimalist Introduction*. Cambridge: University Press.
- Ritter, Elizabeth. 1995. On the Syntactic Category of Pronouns and Agreement. *Natural Language and Linguistic Theory* 13:405-443
- Roberts, Ian 1997. *Comparative Syntax*. London: Ardnold.
- Rowlands, E.C. 1969. *Teach Yourself Yoruba*. London: English University Press.
- Rullmann, Hotze. 2003. General Number and the Semantics and Pragmatics of Indefinite Bare Nouns in Mandarin Chinese. Ms. University of Calgary.
- Rullmann, Hotze. 2004. Bare Nominals and General Number. Paper presented at Department of Linguistics, UBC Job talks series.
- Russell, Kevin. 1997. Optimality Theory and Morphology. In *Optimality Theory: An Overview*. Archangeli Diana and D. Terence Langendoen, eds. Massachusetts. Blackwells. 102-133.
- Sadler, Louisa and Rachel Nordlinger. 2004. Case Stacking in Realizational Morphology. To appear. In *Linguistics*.
- Scalise, Sergio. 1984. *Generative Morphology*. Dordrecht: Foris Publications.
- Schoorlemmer, Maaïke. 1998. Possessors, Articles and Definiteness. Alexiadou, Artemis and Chris Wilder, eds. *Possessors, Predicates and Movement in the Determiner Phrase*. Alexiadou, Artemis and Chris Wilder, eds. Amsterdam: John Benjamins Publishing Company, 55-86.
- Schulte, Kim. 2001. Pragmatic Relevance as Cause for Syntactic Change: The Emergence of Prepositional Complementizers in Romance. In, Blake, Barry J. & Kate Burridge eds. *Historical Linguistics* 377-389.
- Schütze, C. 1996. Korean 'Case Stacking' isn't: Unifying Noncase Uses of Case Particles. In *Proceedings of the North East Linguistic Society* 26, K. Kusumoto (ed). 351-365. Amherst: GLSA Publications.
- Schütze, C. 2001. On Korean 'Case Stacking': The Varied Functions of the Particles *ka* and *lul*. *The Linguistic Review* 18: 193-232.
- Selkirk, Elizabeth O. 1982. *The Syntax of Words*. Cambridge. MIT Press.

-
- Shank, Scott. 2004. *Domain widening*. Doctoral Dissertation. University of British Columbia.
- Siloni, Tal. 1997. *Noun Phrases and Nominalizations: The Syntax of DPs*. Dordrecht: Kluwer.
- Şótilóyè Bòsè. 1999. Phonology. In. *Introduction to Linguistics*. Yusuf, Oṛẹ ed. Ìjẹbú-Òde: Shebiotimo Publications. 33-46.
- Stalnaker, R. 1974. Pragmatic Presuppositions. In M. Munitz and P. Unger eds. *Semantics and Philosophy* 197-213. New York: University Press.
- Storto, Gianluca. 2003. *Possessives in Context: Issues in the Semantics of Possessive Constructions*. Doctoral Dissertation. University of California, Los Angeles.
- Stowell, Timothy. 1978. What was there before there was there? In *Proceedings of the Fourteenth Annual Meeting of the Chicago Linguistic Society*. Donka Farkas ed. Chicago: Chicago Linguistic Society 14:458-471.
- Stowell, Timothy. 1981. *Origins of Phrase Structure*. Doctoral Dissertation, MIT, Cambridge, Mass.
- Stowell, Timothy. 1983. Subjects across Categories. *The Linguistic Review* 2: 285-312.
- Strawson, P. 1952. *Introduction to Logical Theory*. London: Methuen.
- Svenonius, P. 1994. Dependent Nexus: Subordinate Predication Structures in English and the Scandinavian Languages. Doctoral thesis, UCSC.
- Szabolcsi, Anna. 1983. The Possessor that ran away from home. In *The Linguistic Review* 3: 89-102. Dordrecht: Foris Publications.
- Szabolcsi Anna. 1994. The Noun Phrase. In. F. Kiefer and É. Kiss, eds. *Syntax And Semantics* 27: 179-274. *The Syntactic Structure of Hungarian*. San Diego: Academic Press.
- Szabolcsi Anna. 2000. The Syntax of Scope. In: *Handbook of Contemporary Syntactic Theory*, 607-634. Baltin and Collins, eds. New York: Blackwell.
- Takahashi Shoichi and Martina Gracanin Yuksek. 2004. The Syntax of *Ki* in Haitian Creole. MITWPL.
- Vergnaud, J.R., and M. L. Zubizarreta. 1992. The Definite Determiner and the Inalienable Constructions in French and English. In *Linguistic Inquiry* 23:595-652.
- Welmers, William E. 1973. *African Language Structures*. Berkeley: University of California Press.
- Wilhelm Andrea. 2005. Bare Nouns in Dëne Suiné. University of British Columbia Seminar.

-
- Williams, Edwin. 2000. Adjunct Modification. *Rivista di Linguistica* 12(1):129-154.
- Wiltschko, Martina. 2004. On the Absence of Inflectional Plural Marking In Halkomelem Salish: A Formal Account. Ms. University of British Columbia.
- Wiltschko, Martina. 2005. Many Things are not [+plural]. Ms. University of British Columbia.
- Wolfart, H. Christoph. 1972. Plains Cree: A Grammatical Study. *Transactions of the American Philosophical Society*. New Series, 63.5.
- Yang, Henrietta. 2004. Classifiers and Plurality in Mandarin NPs. 27th GLOW. Thessaloniki, Greece.
- Yoon, James H. 2004. Nonnominative (Major) Subjects and Case Stacking in Korean. In P. Bhaskararao and K.V. Subbarao eds. *Non-nominative Subjects*. Amsterdam: John Benjamins, 1-47.
- Yusuf, Oṛẹ. 1995. *Gírámà Yorùbá Àkọtun: Lecture notes series* 3. Ilorin. Obven Publishers.
- Zamparelli, Roberto. 1995. *Layers in the Determiner Phrase*. Doctoral Dissertation. University of Rochester.

Subject Index

- Accusative Case, 109
- Additive Function, 186
- Additivity, 187
- Adjacency Constraint, 237
- Adjunct, 8, 17, 18, 45, 86, 119, 121, 123, 136, 172, 201, 203, 212
- Adjunct Extraction, 123
- Agent, 130
- Agreement, 30, 92, 93, 95, 96, 97, 211, 216, 225, 245, 248, 249, 251, 252
- Allomorphic Variant, 52
- Ambiguity, 45
- Antecedent, 94
- A-Position, 192
- Appositive, 32
- Argument, 27, 131
- Assimilation, 58
- Bare Noun, 1, 3, 4, 11, 127, 128, 132ff, 151ff, 172, 176, 195, 199, 200, 202, 207, 208, 210, 223, 244
- Blocking, 238
- Case, 30
- Case Assignment, 35
- Case Stacking, 110
- C-Command, 10
- Clause Structure, 5, 33
- Clitic Pronoun, 48
- Common Ground, 161
- Complement, 8
- Complementary Distribution, 13
- Construct Genitive, 53
- Construct State, 53
- Copula, 96, 117
- Copy, 213
- Copying, 238
- Cyclic Movement, 18
- Definiteness, 161
- Deictic Element, 13
- Deletion, 59
- Demonstrative, 5, 8, 10, 12, 188, 199, 200, 210, 211, 223, 229, 230, 231, 242, 244, 245, 246, 247
- Determined Plurality, 4, 5, 205, 206, 211, 222
- Discourse Referent, 173
- Discourse-Linking, 11, 19, 23, 133
- DP Hypothesis, 1
- DP Structure, 5
- DP-Syntax, 38
- Dynamic Verb, 131
- Empty Category, 63
- Erase, 213
- Ergative Case, 113
- Events, 130
- Exceptional Case Marking, 106
- Familiarity, 155
- Feature Matching, 213
- Feature Matching Mechanism, 213
- Feature Percolation, 211
- Felicitous Context, 138
- F-Head, 34, 39
- Floating Tone, 219
- Focus Constructions, 189
- Focus Position, 190
- Free Choice, 197
- Free State, 53
- Full Relative Clause, 89
- Functional Heads, 16, 17, 18, 40, 106, 112
- Gen Operator, 136
- General Number, 207
- Generic, 3, 11, 127, 128, 133, 135ff, 171
- Generic Construal, 3
- Genitive Case, 50
- Genitive Construction, 2, 19, 21, 27, 45, 51, 63, 65, 75ff, 81, 89, 91, 98, 110, 168, 223
- Genitive DPs, 2, 6, 7, 54, 80, 87, 97, 105, 106, 113, 119, 168

-
- Genitive Formative, 51
 - Genitive Marker, 8, 11, 26, 32, 33, 34, 35, 40, 48, 51, 57, 58, 62, 63, 68, 70, 76, 77, 87
 - Genitive Morpheme, 6
 - Genitive Pronoun, 48
 - Government, 107
 - Grammar, 213
 - Head Agreement, 95
 - Head-Complement, 27
 - Head-Final Ordering, 7
 - Head-Initial, 7, 8
 - Head-Initial Ordering, 7
 - Higher Phrase, 18
 - Identity Function, 186
 - Imperfective, 153
 - Infelicitous Context, 162
 - Inflectional Morphology, 247
 - Intransitive, 147
 - IP-Syntax, 38
 - Landing Site, 18, 89, 110
 - Last Resort, 158
 - L-Deletion, 68
 - Linear Correspondence Axiom, 27
 - L-Tone, 68
 - Maximal Projection, 17
 - Minimalist Theory, 213
 - Modification, 5, 14
 - Modifier, 5
 - Mora, 57
 - Morphology, 101
 - Morphosyntax, 57
 - M-Tone Syllable, 2, 6
 - N-Genitive, 36
 - Nominal, 1, 2, 5, 7, 8, 11, 18, 19, 22f, 27ff, 51, 77, 79, 80, 82, 91ff, 95, 96, 97, 100, 101, 103, 109, 115, 117, 124, 169, 171, 172, 186, 192, 200, 203, 211ff, 222, 225, 237, 239, 241, 244, 245, 247, 249, 251
 - Nominal Domain, 95
 - Nominal Genitive, 5, 35
 - Nominal Head, 82
 - Nominal Predicate, 97
 - Nominal Projection, 8
 - Nominative Case, 25, 108, 109, 151
 - Noun, 3ff, 14, 19, 21ff, 41, 44, 48, 53, 54, 62, 66ff, 74, 85, 94, 97, 99ff, 107, 113, 127, 128, 133ff, 152ff, 161, 162, 164, 167, 171, 174, 186ff, 194, 199, 200, 202, 206, 207, 214ff, 220ff, 227, 230, 232, 235, 237, 239ff
 - Novelty Condition, 155
 - N-Syntax, 35
 - Null Pronominal, 99
 - Number, 93
 - Object, 83
 - Obligatory Plural Construal, 214
 - Operator, 84
 - Part-Whole Relation, 25
 - Past Perfect, 132
 - Percolation, 212
 - Permanent States, 129
 - Person, 93
 - Phonological Features, 213
 - Phonological Rules, 51
 - Phonological Spell Out, 39
 - Phonology, 51
 - Pied-Piping, 17
 - Plural, 1, 12, 18, 93, 94, 127, 154, 190, 205ff
 - Plural Marking, 4
 - Plural Parameter, 247
 - Plural Percolation, 212
 - Plural Word, 222
 - Possessive, 1, 5, 8, 19, 20, 22, 23, 24, 25, 26, 29, 30, 36, 39, 50, 62, 67, 77, 79, 101, 104
 - Possessor, 1, 2, 5, 6, 10ff, 19, 23, 25ff, 54, 57, 60, 61, 63, 67, 70ff, 91, 92, 97, 103ff, 111, 112, 114, 116, 118, 124
 - Possessor-Possessum, 1, 26, 27, 34
 - Possessum, 2, 5, 6, 8, 9, 10, 11, 12, 19, 25ff, 46, 47, 50, 51, 53, 54, 57, 63, 68, 70ff, 75ff, 79, 80, 83, 87, 91, 92, 97ff, 118, 119
 - Pragmatics, 1
 - Predicate, 117
 - Prefixation, 228
 - Preposition, 35
 - Present Perfect, 132
 - Progressive (Continuous) Aspect, 131
 - Prosthetic Vowel, 51
 - Q-Raising, 137

-
- Quantifiers, 218
Reduced Relative, 2, 6, 40, 81, 82, 87ff, 96,
97, 118, 119, 124
Reduplication, 232
Reflexive Pronoun, 48
Relational Noun, 19
Relative Clause, 5, 6, 81, 82, 84, 85, 86, 87,
88, 91, 92, 93, 95, 103
Resumptive Pronoun, 93
Right Adjunction, 16
R-Relation, 19, 20, 23, 29, 32, 119
Salience, 171
Salience Marker, 186
Saxon Genitive 'S, 30
Selectional Restriction, 46
Semantics, 1
Simple Past, 132
Small Clause, 2, 5, 6, 8, 12, 28, 29, 31, 33,
34, 46, 54
Snowball Movement, 17
Spec-Head Agreement, 92
Specificity, 171
Specifier, 18
Specifier-Head-Complement, 8, 27
Stranding Condition, 104
Stress, 53
Structural Case, 25
Subject, 117
Syntactic Movement, 17
Syntax, 1, 6, 9, 12, 19, 27, 31, 34ff, 43, 45,
51, 52, 61, 75, 77, 79, 98, 101, 103, 105,
142, 149, 151, 172, 201, 210, 224, 241
Temporary States, 129
Theme, 130
Theory, 213
Theory Of Existentiality, 158
Theta-Role, 25
Tonal Melody, 65
Tone Bearing Unit, 220
Transitive, 146
Transitivity, 130
Uniqueness Function, 186
Verbal Domain, 95
Verbal Genitives, 5
Vowel Reduction, 53
vP Shell, 79
V-Possessive, 36
V-Syntax, 35
X-Bar Theory, 34

ABOUT THE AUTHOR

Dr. Oládiípòò Ajíbóyè studied Linguistics first at the University of Ilorin and later at the University of British Columbia, Vancouver, Canada. He taught previously at the University of Ilorin and was a Language Consultant at the University of British Columbia. He is currently a teacher of Linguistics at University of Abuja where he engages in a number of research collaboration with colleagues locally and internationally. His areas of specialization include phonology-syntax and syntax-semantics interface.

ABOUT THE BOOK

This book is the published version of Dr. Oládiípòò Ajíbóyè's doctoral dissertation which he defended at the Department of Linguistics, University of British Columbia, Vancouver, Canada, on 31 October, 2005. It departs from most previous works on Yorùbá Grammar in the sense that rather than being purely a descriptive grammar, it attempts to provide a theoretical analysis of the internal and external syntax of Yorùbá nominal expressions using the Chomskyan Principles and Parameters approach to syntax. The theme of the book covers four areas of Yorùbá nominal expressions, namely possessive/genitive constructions, the construal of bare nouns, the marking of specificity and salience and strategies of plural marking.

Regarding possessives, it is proposed that they have one base structure (VP Shell). The difference in surface linear order between verbal and nominal genitives is determined by which of the two arguments moves. In nominal genitives, the possessum moves. In verbal genitives, it is the possessor that moves.

Regarding the interpretation of Yorùbá bare nouns, it is shown that they can be construed in one of three ways: as generics, as indefinites, or as definites.

Regarding specificity, it is established that Yorùbá overtly marks specificity on NPs with the element *kan*. Regarding salience, it is shown that definite DPs are morphologically marked as salient (by virtue of being unique, in an identity relation or additive) through the use of *náà*.

Finally, regarding plural marking, it is claimed that Yorùbá uses three different strategies: contextually, semantically, or morphologically determined plurality. It is proposed that the deployment of the PLURAL feature cross-linguistically is determined by feature percolation or feature matching.

ISBN 978-978-54164-5-9

